

# COURSES



## Academic Development Courses

### ACDV B5 Tutor Training and Practicum Level 1

1 units

**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:** Reading - 1 Level Prior to Transfer

**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

**CCS:** Liberal Arts/Science

**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:** Reading - 1 Level Prior to Transfer

**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

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### ACDV B50 Advanced Reading and Critical Thinking

3 units

**Prerequisites:** Reading - 1 Level Prior to Transfer or ACDV B62 with a grade of 'C' or better

**Recommended:** Writing - 1 Level Prior to Transfer or ENSL B51

**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

**CCS:** Pre-collegiate basic skills

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

### ACDV B55 First Year Student Success

0.5 unit

**Description:** Introduces the college's academic, social, and physical environments and promotes personal development necessary for student success. To increase their probability of college success, students will locate, navigate, and utilize the campus academic and student services resources. Course covers note-taking, test-taking, textbook reading, effective communication, and time-management skills necessary for college success.

**Hours:** 9 lecture

**CCS:** Pre-collegiate basic skills

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

### ACDV B61 Accelerated Reading

4 units

**Prerequisites:** Reading - three levels prior to transfer

**Advisory:** ENSL B70 and/or ACDV B201A, and/or ACDV B201B.

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.

**Hours:** 72 lecture

**CCS:** Pre-collegiate basic skills.

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

### ACDV B62 College Textbook Reading Skills

3 units

**Prerequisite:** Reading - 2 Levels Prior to Transfer

**Recommended:** Writing - 2 Levels Prior to Transfer

**Description:** Recommended for students who need to improve vocabulary and reading comprehension and reading flexibility.

Focuses on demonstration and application of reading strategies as they apply to textbook reading. Includes paragraph analysis, study strategies such as SQ3R and outlining, and vocabulary building techniques. Includes literature and library projects and activities. Provides practice in reading application and analysis level thinking skills.

**Hours:** 54 lecture

**CCS:** Pre-collegiate basic skills

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

### ACDV B65 Developing College Writing Skills

2 units

**Prerequisites:** Writing - three levels prior to transfer or ACDV B201B and reading - two levels prior to transfer

**Description:** Designed to prepare students for success in English Level 04 by developing basic multi-paragraph writing skills in response to expository passages. Emphasizes the writing process and the review of basic English writing conventions.

**Hours:** 36 lecture

**CCS:** Pre-collegiate basic skills.

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

### ACDV B66 Student Success

1-3 units

**Recommended:** Concurrent enrollment in ACDV B280 or B281.

**Description:** Covers the development of successful personal behaviors; interpersonal skills development, effective listening and note taking, time management, textbook reading, math computation, and test taking skills necessary for success in connected core courses.

**Hours:** 18 lecture hours for each unit (18-54)

**CCS:** Pre-collegiate basic skills

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

### ACDV B70A Study Skills: Time Management

0.5 unit

**Recommended:** Reading - four levels prior to transfer or satisfactory completion of ACDV B62 with minimum grade of C.

**Description:** Students may take any or all of the six mini-courses offered. Each half-unit course is designed to give practical training in studying effectively for college classes. Students work interactively in small groups, whole class and independently through guided instruction and hands-on activities to improve skills in the following areas: Topics: B70A-Time Management; B70b-Note Taking;

B70c-Textbook Reading; B70d-Test Taking; B70e- Memory; B70f-Vocabulary.

**Note:** Offered Pass/No Pass grading only.

**Hours:** 9 lecture, 6 laboratory

**CCS:** Pre-collegiate basic skills

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

### ACDV B70B Study Skills: Note Taking

*0.5 unit*

**Recommended:** Reading - four levels prior to transfer or satisfactory completion of ACDV B62 with minimum grade of C.

**Description:** Students may take any or all of the six mini-courses offered. Each half-unit course is designed to give practical training in studying effectively for college classes. Students work interactively in small groups, whole class and independently through guided instruction and hands-on activities to improve skills in the following areas: Topics: ACDV B70a-Time Management, ACDV B70b-Note Taking, ACDV B70c-Textbook Reading, ACDV B70d-Test Taking, ACDV B70e-Memory, ACDV B70f-Vocabulary.

**Note:** Offered Pass/No Pass grading only.

**Hours:** 9 lecture, 6 laboratory

**CCS:** Pre-collegiate basic skills

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

### ACDV B70C Study Skills: Textbook Reading

*0.5 unit*

**Recommended:** Reading - four levels prior to transfer or satisfactory completion of ACDV B62 with minimum grade of C.

**Description:** Students may take any or all of the six mini-courses offered. Each half-unit course is designed to give practical training in studying effectively for college classes. Students interactively work in small groups, whole class and independently through guided instruction and hands-on activities to improve skills in the following areas: Topics: ACDV B70a-Time Management, ACDV B70b-Note Taking, ACDV B70c-Textbook Reading, ACDV B70d-Test Taking, ACDV B70e-Memory, ACDV B70f-Vocabulary.

**Note:** Offered Pass/No Pass grading only.

**Hours:** 9 lecture, 6 laboratory

**CCS:** Pre-collegiate basic skills

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

### ACDV B70D Study Skills: Test Taking

*0.5 unit*

**Recommended:** Reading - four levels prior to transfer or satisfactory completion of ACDV B62 with minimum grade of C.

**Description:** Students may take any or all of the six mini-courses offered. Each half-unit course is designed to give practical training in studying effectively for the college classes. ACDV B70d-Test Taking, offered Credit/No Credit grading.

**Hours:** 9 lecture, 6 laboratory

**CCS:** Pre-collegiate basic skills

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

### ACDV B70E Study Skills: Memory

*0.5 unit*

**Recommended:** Reading - four levels prior to transfer or satisfactory completion of ACDV B62 with minimum grade of C.

**Description:** Students may take any or all of the six mini-courses offered. Each half-unit course is designed to give practical training in studying effectively for college classes. ACDV B70e-Memory, offered Credit/No Credit grading.

**Hours:** 9 lecture, 6 laboratory

**CCS:** Pre-collegiate basic skills

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

### ACDV B70F Study Skills: Vocabulary

*0.5 unit*

**Recommended:** Reading - four levels prior to transfer or satisfactory completion of ACDV B62 with minimum grade of C.

**Description:** Students may take any or all of the six mini-courses offered. Each half-unit course is designed to give practical training in studying effectively for college classes. ACDV B70f-Vocabulary, offered Credit/No Credit grading.

**Hours:** 9 lecture, 6 laboratory

**CCS:** Pre-collegiate basic skills

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

### ACDV B72 Basic Arithmetic & Pre-Algebra

*4 units*

**Recommended:** Reading - two levels prior to transfer

**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

**CCS:** Credit course

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

### ACDV B77 Developing College Math Skills

*2 units*

**Recommended:** Reading - three levels prior to transfer

**Description:** This course provides an emphasis on basic arithmetic operations including whole numbers, fractions, decimals, and percent to prepare students for pre-algebra course.

**Hours:** 36 lecture

**CCS:** Pre-collegiate basic skills

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

### ACDV B190 Assistive Technology for Students with Disabilities

*0.5 unit*

**Description:** Provides individual computer access assessment.

Based on the findings, students are trained on the appropriate access technologies (text-to-speech, voice recognition, reading and writing tools, etc.). Designed to teach the fundamental access technologies needed for the student to complete writing assignments, web search projects, and to be independent in other courses.

**Hours:** 9 lecture

**CCS:** Pre-collegiate basic skills

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

### ACDV B195 Word Processing for Students with Disabilities

*3 units*

**Recommended:** Reading - two levels prior to transfer

**Description:** Fundamentals of word processing using methods and materials designed for students with various disabilities.

**Hours:** 54 lecture

**CCS:** Pre-collegiate basic skills

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

### **ACDV B201A Communication Skills: Reading**

*0.5-1 unit*

**Description:** Individually prescribed lessons in spelling, reading, vocabulary development, study skills, critical thinking and/or English. Supervised repetition and practice in the laboratory on assigned tasks which may range from general communication skills to specific problems. NOTE FOR ALL ACDV B200 SERIES COURSES: Courses numbered in the B201 and B281 series are open entry/open exit. Students should report to SS 143 as soon as possible to find out course requirements.

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

**CCS:** Pre-collegiate basic skills

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

### **ACDV B201B Communication Skills: Writing**

*0.5-1 unit*

**Description:** Individually prescribed lessons in spelling, reading, vocabulary development, study skills, critical thinking and/or English. Supervised repetition and practice in the laboratory on assigned tasks which may range from general communication skills to specific problems. NOTE FOR ALL ACDV B200 SERIES COURSES: Courses numbered in the B201 and B281 series are open entry/open exit lab courses. Students should report to SS 143 as soon as possible to find out course requirements.

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

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

**CCS:** Pre-collegiate basic skills

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

### **ACDV B201C Developing Basic Math Skills**

*0.5-1 unit*

**Description:** Individually prescribed lessons in basic math skills from number systems through advanced algebra. Supervised repetition and practice in the laboratory on assigned lessons and assessments.

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

**CCS:** Pre-collegiate basic skills

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

### **ACDV B280 Supervised Tutoring**

*0 unit*

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

**Note:** Weekly hours are decided jointly by the instructor and student. Students cannot register by telephone or the web for this course: see instructor in SS 203 to complete enrollment. Open entry/open exit.

**Hours:** 1 to 54

**Repeat** unlimited

**CCS:** Non-Enhanced Funding

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

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

*0 unit*

**Description:** Provides tutoring in various academic subjects, conducted in a computer lab, to augment classroom instruction. Open entry/open exit.

**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 to 85

**Repeat:** Unlimited

**CCS:** Non-Enhanced Funding

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

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

*0 unit*

**Description:** Provides tutoring in various academic subjects, conducted in a computer lab, to augment classroom instruction. Open entry/open exit.

**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 to 85

**Repeat:** Unlimited

**CCS:** Non-Enhanced Funding

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

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

*0 unit*

**Description:** Provides tutoring in various academic subjects, conducted in a computer lab, to augment classroom instruction. Open exit/open exit.

**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 - 85

**Repeat:** Unlimited

**CCS:** Non-Enhanced Funding

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

## **Administration of Justice Courses**

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

*1 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, 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 (POST) requirements.

**Hours:** 30 lecture, 10 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **ADMJ B61 PC 832 Firearms Training**

*0.5 unit*

**Prerequisites:** ADMJ B60 with minimum grade of C.

**Description:** Provides students with the competencies required for certification by Peace Officer Standards and Training (POST) for Penal Code section 832 Firearms. 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.

**Hours:** 8 lecture, 16 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

## ADMJ B63 Bureau of Security and Investigative Services Occupational License (BSIS-Security Guard)

0.2 unit

**Description:** Provide the student with the knowledge and skills to pass the State of California mandated exam for a Security Guard Card and to function at the entry level of the security profession. Class meets the certification requirements for the Bureau of Security and Investigative Services from the California State and Consumer Services Agency.

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

## ADMJ B65 Emergency/Commercial License Preparation

1 unit

**Description:** Designed to prepare students for taking the California Class A/B written driving test, thereby enabling the successful examinee to obtain a California Class A/B learner permit.

**Hours:** 24 lecture, 16 laboratory

**CCS:** Occupational Education

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

## ADMJ B75 Diversity in the Workplace

3 units

**Recommended:** Reading - one level prior to transfer.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## 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

**CCS:** Occupational Education

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

## Agriculture Business Management Courses

### AGBS B2 Agricultural Economics

3 units

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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.

**Hours:** 54 lecture

**CCS:** Occupational Education

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

### AGBS B6 Agriculture Sales and Communication

3 units

Advisory Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

## Agriculture Courses

### AGRI B1 Agriculture, Environment, and Society

3 units

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

## American Sign Language Courses

### ASL B1 American Sign Language 1

5 units

**Recommended:** Reading - one level prior to transfer.

**Description:** Study of fundamentals of American Sign Language (ASL). Introduces the 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 with video tape programs. Field trips required.

**Hours:** 90 lecture

**CCS:** Liberal Arts/Science

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

### ASL B2 American Sign Language 2

5 units

**Prerequisites:** ASL B1 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**Description:** Continued study of the fundamentals of American Sign Language. Emphasizes grammatical structure, various sentence types, giving directions, conceptual accuracy, vocabulary, verb agreement, and increased fingerspelling and numerical proficiency. Further development of conversational strategies. Exploration of Deaf culture emphasizing Deaf history in the United States. Field trips required.

**Hours:** 90 lecture

**CCS:** Liberal Arts/Science

**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**

*5 units*

**Prerequisites:** ASL B2 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**Description:** Study of advanced aspects of American Sign Language. Emphasizes advanced conversational fluency in ASL along with intensive work on comprehensive skills and grammatical structure. Focus on temporal aspects, conditional clauses, pronouns, and non-manual indicators. Discussion of various aspects of American Deaf culture with focus on literary tradition. Field trips required.

**Hours:** 90 lecture

**CCS:** Liberal Arts/Science

**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**

*5 units*

**Prerequisites:** ASL B3 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**Description:** Advanced study of American Sign Language. Emphasis is on receptive and expressive conversational fluency and contrasting hearing and Deaf rhetorical approaches. Focus on specific linguistic aspects of ASL, such as classifiers and role-shifting. Advanced practice with receptive and expressive fingerspelling. Also includes issues pertinent to Deaf culture.

**Note:** Field trips required.

**Hours:** 90 lecture

**CCS:** Liberal Arts/Science

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

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

*3 units*

**Prerequisites:** ASL B1 with a grade of 'C' or better.

**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.

**Note:** Field trips required.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **ASL B7 ASL Literature and Performance**

*3 units*

**Prerequisites:** ASL B2 (with a grade of 'C' or better). Community performance required.

**Description:** Exploration and analysis of storytelling, folklore, poetry, and music of the American Deaf community. Analysis and interpretation of musical lyrics into visual concepts; study and performance of ASL poetry, hand-shape and ABC stories. Study of Deaf folklore and other forms of oral storytelling traditions.

**Note:** Field trips required.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

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

## **Animal Science Courses**

### **ANSC B1 Introduction to Animal Science**

*3 units*

Advisory Reading - one level prior to transfer.

**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.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

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

### **ANSC B2 Beef Production**

*3 units*

**Recommended:** ANSC B1. Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**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 laboratory

**CCS:** Occupational Education

**Transferable:** UC, CSU and private colleges

### **ANSC B4 Dairy Production**

*3 units*

**Recommended:** Reading- one level prior to transfer and algebra.

**Description:** Defines and appraises all segments of the dairy industry focusing on production, reproduction, marketing, and milk/dairy processing. History and the development of important breeds and their contribution to the U.S. industry will be emphasized. Selection, nutrition, health management, handling, and processing will be defined, analyzed, and applied.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ANSC B5 Swine Production**

*3 units*

**Recommended:** Reading - one level prior to transfer and high school algebra with a grade of 'C' or better.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ANSC B6 Applied Animal Nutrition**

*4 units*

**Recommended:** Reading - one level prior to transfer and algebra.

**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 laboratory

**CCS:** Occupational Education

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ANSC B10 Horse Production**

*3 units*

**Recommended:** ANSC B1. Reading - one level prior to transfer.

**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. Laboratory required. Field Trips.

**C-ID:** AG-AS 116L

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**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. Laboratory required.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** UC, CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

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

*4 units*

**Description:** Introductory course designed to orient 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.

**Note:** formerly ANSC B80 and ANSC B82.

**Hours:** 72 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

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

*1.5 units*

**Prerequisites:** Either ANSC B83 or both ANSC B80 and ANSC B82 with grades 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

**CCS:** Credit - degree applicable

**Transferable:** Associate Degree only Not transferable.

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

*1.5 units*

**Prerequisites:** Either ANSC B83 or ANSC B80 with a grade 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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

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

*1.5 units*

**Prerequisites:** Either ANSC B83 or both ANSC B80 and ANSC B82 with grades 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

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

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

1.5 units

**Prerequisites:** Either ANSC B83 or ANSC B80 with a 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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

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

2 units

**Prerequisites:** Either ANSC B83 or both ANSC B80 and ANSC B82 with grades of 'C' or better.

**Description:** Provides the student with knowledge required to recognize 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

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

## **ANSC B92 Clinical Pathology for Veterinary Technicians**

2 units

**Prerequisites:** Either ANSC B83 or both ANSC B80 and ANSC B82 with grades 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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## **ANSC B94 Caged Birds, Laboratory, and Exotic Animal Medicine**

2 units

**Prerequisites:** Either ANSC B83 or both ANSC B80 and ANSC B82 with grades of 'C' or better.

**Description:** Covers anatomy, physiology, disease descriptions, and identification of caged birds, laboratory, and exotic animals. Instruction in restraint, physical examination, anesthesia, surgery, specimen collection, species identification, and the legal ramifications of owning exotic animals.

**Hours:** 36 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

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

1.5 units

**Prerequisites:** Either ANSC B83 or both ANSC B80 and ANSC B82 with grades 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

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

## **Anthropology Courses**

### **ANTH B1 Physical Anthropology**

3 units

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

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

### **ANTH B2 Cultural Anthropology**

3 units

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Scientific study of contemporary cultures and their lifeways. Focuses on behavioral patterns, learning, diversity, and culture as an adaptive mechanism. Emphasis 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

**CCS:** Liberal Arts/Science

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

### **ANTH B3 Introduction to Archaeology**

3 units

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

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

## 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

**CCS:** Occupational Education

**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 laboratory

**CCS:** Occupational Education

**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 laboratory

**CCS:** Occupational Education

**Transferable:** UC, CSU and private colleges

### ARCH B12 Design, Drawing and Color

*4 units*

**Prerequisites:** ARCH 11 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 laboratory

**CCS:** Occupational Education

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### ARCH B21 Architectural Design Fundamentals I

*4 units*

**Prerequisites:** ARCH B1, B11, B12 with grades of 'C' or better. Field trips required.

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

**Materials Fee:** \$3.00

**Hours:** 36 lecture, 108 laboratory

**CCS:** Occupational Education

**Transferable:** UC, CSU and private colleges

### ARCH B22 Architecture Design Fundamentals II

*4 units*

**Prerequisites:** ARCH B21 with a grade of 'C' or better. Field trips required.

**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.

**Materials Fee:** \$3.00

**Hours:** 36 lecture, 108 laboratory

**CCS:** Occupational Education

**Transferable:** UC, CSU and private colleges

### ARCH B30 Residential Building Information Modeling

*4 units*

**Prerequisites:** Arch B6.

**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:** \$3.00

**Hours:** 36 lecture, 108 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### ARCH B33 Architectural Computer Practice

*3 units*

**Prerequisites:** 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:** \$3.00

**Hours:** 27 lecture, 81 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### ARCH B55 Residential Building Codes

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **ARCH B56 Commercial Building Codes**

*3 units*

**Recommended:** Reading - one level prior to transfer

**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

**CCS:** Occupational Education

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

## **Art Courses**

### **ART B1 Art Appreciation**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

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

### **ART B2 Drawing I**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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. Non repeatable.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**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*

**Prerequisites:** ART B2 or equivalent with grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**Description:** A continuation of ART B2. 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 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **ART B4 Two-Dimensional Design**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** 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. Not open to students with credit in ART B3a, B3b, or ART B3ab.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**C-ID:** ARTS 100

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

### **ART B5 Three-Dimensional Design**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Introduction to form, structure, the elements of design and three-dimensional design theory. Course includes an exploration of various materials and techniques, with an emphasis on the creative process.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**C-ID:** ARTS 101

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

### **ART B6 Acrylic Painting I**

*3 units*

**Prerequisites:** ART B2 with a grade of 'C' or better or equivalent.

**Recommended:** Reading - one level prior to transfer.

**Description:** Introduces the use of acrylic paint as an expressive medium. Tools, techniques, compositional elements, color theory, and craftsmanship as applied to painting are covered. Not open to students who have taken ART B4a, B4b or ART B4ab.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **ART B7 Acrylic Painting II**

*3 units*

**Prerequisites:** ART B6 with a grade of 'C' or better.

**Description:** Continuation of ART B6. Students review and refine techniques using acrylic paint as an expressive medium. Emphasis is placed upon personal explorations. Not open to students who have taken ART B4c, B4d, or ART B4cd.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **ART B8 Figure Drawing I**

*3 units*

**Prerequisites:** ART B2 with a grade of 'C' or better, or equivalent.

**Recommended:** Reading - one level prior to transfer.

**Description:** 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 taken ART B2e, B2f or ART B2ef.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **ART B9 Figure Drawing II**

*3 units*

**Prerequisites:** ART B8 with a grade of 'C' or better, or equivalent (ART B2ef with grades of 'C' or better).

**Recommended:** Reading - one level prior to transfer.

**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. Not open to students who have successfully completed ART B2g, B2h, or ART B2gh.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### ART B10 Ceramics I

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** 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. Not open to students who have successfully completed ART B7a, B7b, or ART B7ab.

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

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

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

### ART B11 Ceramics II

*3 units*

**Prerequisites:** ART B10 with a grade of 'C' or better or ART B7a, B7b, or ART B7ab with grades of 'C' or better.

**Description:** 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. Not open to students who have successfully completed ART B7c, B7d, or ART B7cd.

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

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### ART B12 Ceramics III

*3 units*

**Prerequisites:** ART B11 or ART B7cd with a grade of 'C' or better, or ART B7c and ART B7d with grades of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**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. Not open to students who have successfully completed ART B7e and B7f or ART B7ef.

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

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### ART B13 Sculpture I

*3 units*

**Prerequisites:** ART B5 (Three Dimensional Design).

**Recommended:** Reading - one level prior to transfer.

**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. Not open to students who have successfully completed ART B11a and B11b, or ART B11ab.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges; CSU GE C.1

### ART B14 Sculpture II

*3 units*

**Prerequisites:** ART B16 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**Description:** Advanced study in sculptural concepts and three-dimensional forms. Explores the expressive meaning of form and the expressive potential of materials. Not open to students who have successfully completed ART B11cd.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### ART B16 Digital Photography

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Liberal Arts/Science

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

### ART B17 Black and White Photography

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** In this course students will study the basic principles of cameras, optics, light, film development, exposure, exposure meters, and enlarging. Photographic quality, exploration of the photographers environment, and personal expression is emphasized. A suitable 35mm film camera is required. Not open to students who have successfully completed ART B17ab, or ART B17a and B17b.

**Materials Fee:** \$25.00

**Hours:** 27 lecture, 81 laboratory

**CCS:** Liberal Arts/Science

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

### ART B20 Digital Art I - Vector Art

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** 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 laboratory

**CCS:** Occupational Education

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

### ART B24 Digital Art II - Raster Art

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

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

### **ART B25 Typography**

*3 units*

**Prerequisites:** ART B20 and ART B24 with grades of 'C' or better or equivalent.

**Recommended:** Reading - one level prior to transfer.

**Description:** Course focuses on effective letterform usage in visual media. Students create typographic design solutions and explore the evolution of letterforms from ancient to contemporary. Projects feature investigating 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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

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

*1-3 units*

**Prerequisites:** Limitation on Enrollment (e.g. Performance tryout or audition). Student must have successfully completed a sequence of courses; and have approval by professor after a portfolio review.

**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 laboratory hours for each unit (54-162)

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Course is a historical survey of western architecture and visual arts beginning in the Paleolithic age (30,000 BC) and continuing through Proto-Renaissance (1400 CE).

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** 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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Course is a historical survey of the western architecture and visual arts from 1400 CE to the present day.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** 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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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 who have taken the equivalent courses, CHST B30e or ART B30e.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

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

### **ART B40 Digital Illustration**

*3 units*

**Prerequisites:** ART B25 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**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. Formerly ART B22. Not open to students who have successfully completed ART B22.

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

**Hours:** 27 lecture, 81 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ART B41 Advertising Design**

*3 units*

**Prerequisites:** ART B20, B24 and ART B25 with grades of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**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. Not open to students who have successfully completed ART B23.

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

**Hours:** 27 lecture, 81 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ART B42 Graphic Design**

*3 units*

**Prerequisites:** ART B40 and ART B41

**Recommended:** Reading - one level prior to transfer.

**Description:** Course in design with an emphasis on visual communication. Through concept development, type, and images, students create original design solutions. Identify ad branding development is introduced. Project based course. Students progress at their own speed through projects, which are developed with increasing technical complexity.

**Materials Fee:** \$15.00

**Note:** Not open to students with credit in ART B21.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

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

*3 units*

**Prerequisites:** ART B16, or ART B17 with grades of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** UC, CSU and private colleges

**ART B47 Advanced Photography II***3 units***Prerequisites:** ART B46 or B17cd with grades of 'C' or better.**Recommended:** Reading - one level prior to transfer.**Description:** Course is 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 laboratory**CCS:** Occupational Education**Transferable:** CSU and private colleges**ART B48 Advanced Photography III - Independent Study***1-3 units***Prerequisites:** ART B17gh or ART B47 with grades of 'C' or better.**Recommended:** Reading - one level prior to transfer.**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. Evaluation by instructor of students photography skills.**Materials Fee:** \$15.00**Hours:** 54 laboratory hours for each unit (54-162)**CCS:** Occupational Education**Transferable:** CSU and private colleges**Astronomy Courses****ASTR B1 Physics of the Cosmos***3 units***Prerequisites:** Reading - one level prior to transfer.**Recommended:** MATH BA or MATH B60 with a grade of 'C' or equivalent.**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 is examined from the astronomical perspective. Among topics include: 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 structures; astronomical instruments; brief history of astronomy; Newton's law of gravity; general relativity.**Hours:** 54 lecture**CCS:** Liberal Arts/Science**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:** Reading - one level prior to transfer.**Recommended:** Math BA or MATH B60 with a grade of 'C' or better.**Description:** Introductory course on the scientific search for life in the universe. The process and philosophy of science is 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**CCS:** Liberal Arts/Science**Transferable:** CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1**ASTR B3 Solar System***3 units***Prerequisites:** Reading - one level prior to transfer.**Recommended:** Math BA or MATH B60 with a grade of 'C' or better.**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**CCS:** Liberal Arts/Science**Transferable:** UC, CSU and private colleges; IGETC 5.A; CSU GE B.1; BC GE B.1**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 1) 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, 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**CCS:** Occupational Education**Transferable:** CSU and private colleges, elective credit only**AUTO B2A Engine Repair and Machining***9 units***Recommended:** AUTO B1AB or evaluation of previous experience by instructor.**Description:** This course covers the acquisition of practical skills required for accurate internal combustion engine diagnosis, repair and all phases of engine rebuilding machine work. Demonstrated lecture, simulated problem diagnosis and practical application on live vehicles will be used. Individual instruction on engine rebuilding machinery & tools is an integral part of this course. Engine theory, design, diagnosis, repair, practical and theoretical high performance modifications are all part of this course. Preparation for the A1 and A8 ASE exams will be covered. Theory of internal combustion, piston-type engine design and maintenance. Practice in engine overhaul procedures and mechanical problems diagnosis. This course is similar to Auto B75A but includes more lab hours. The extended lab time offers a greater degree of practical experience.**Materials Fee:** \$15.00**Hours:** 108 lecture, 162 laboratory**CCS:** Occupational Education**Transferable:** CSU and private colleges, elective credit only**AUTO B2B Advanced Engine Repair and Machining***9 units***Prerequisites:** AUTO B2a with a grade of 'C' or better.

**Description:** This course covers the acquisition of advanced skills required for accurate internal combustion engine diagnosis, repair and all phases of engine rebuilding machine work. Demonstrated lecture, simulated problem diagnosis and practical application on "live" vehicles will be used. Individual instruction on advanced engine rebuilding machinery & tools is an integral part of this course. Advanced engine theory, design, diagnosis, repair, practical and theoretical high performance modifications are all part of this course. Preparation for the A1 and A8 ASE exams will be covered. Theory of internal combustion, piston-type engine design and maintenance. Practice in engine overhaul procedures and mechanical problems diagnosis. This course is similar to Auto B75B but includes more lab hours. The extended lab time offers a greater degree of practical experience

**Material Fee:** \$15.00 for Hazmat removal, solvents and cleaners.

**Hours:** 108 lecture, 162 laboratory

**CCS:** Credit Course

**Transferable:** CSU and private colleges, elective credit only

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

*4 units*

**Recommended:** AUTO B1a with a grade of 'C' or better, and Reading - one level prior to transfer.

**Description:** 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. Positions are: 1) Service Writer/Advisor, 2) Parts-Sales and Service (Parts Counter Person), 3) Warranty Specialist and 4) DMV Specialist.

**Hours:** 54 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges, elective credit only

### **AUTO B14 Auto Tune-Up: Electrical/Ignition/Accessories**

*11 units*

**Recommended:** AUTO B1ab with a grade of 'C' or better, or one year of automotive repair work experience. Reading - one level prior to transfer

**Description:** Prepares for ASE A6, A8 exams. Fundamentals of automotive electrical/electronic component repair. Includes electrical theory, diagnosis and repair of battery, starting, charging and ignition systems including computer controlled systems. Laboratory emphasis on computerized diagnosis of the modern automobile.

**Note:** Elective credit only.

**Hours:** 162 lecture, 108 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges, elective credit only

### **AUTO B15 Auto Tune-Up: Fuel Systems and Emissions Controls**

*11 units*

**Recommended:** AUTO B1ab with a grade of 'C' or evaluation by instructor of previous work experience. Reading - one level prior to transfer.

**Description:** Theory, operation, and servicing of automotive fuel systems, emission systems and advanced engine performance. Prepares for the ASE A8 exam.

**Hours:** 162 lecture, 108 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges, elective credit only

### **AUTO B50AB Diesel and Heavy Equipment Technician Training**

*7 units*

**Description:** Repair service on heavy equipment. Emphasizes maintenance, repair, trouble-shooting, design, safety, tool usage, welding and air conditioning. Not open to students with credit in AUTO B50A or AUTO B50B or AUTO B80.

**Hours:** 64 lecture, 192 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **AUTO B56A Diesel Engines and Systems Basics**

*2 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Diesel technology used in agriculture and transportation industries, covers principles of operation, diagnosis and service.

**Hours:** 18 lecture, 18 laboratory

**CCS:** Occupational Education

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

### **AUTO B56B Diesel Engines and Systems Basics**

*2 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Diesel technology used in agriculture and transportation industries, covers principles of operation, diagnosis and service.

**Hours:** 18 lecture, 18 laboratory

**CCS:** Occupational Education

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

### **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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **AUTO B61 Basic and Enhanced Area Clean Air Car Course**

*4 units*

**Recommended:** Reading - one level prior to transfer. AUTO B1ab with grades of 'C' or better, or one year of automotive repair work experience in automotive performance and emissions.

**Description:** Course prepares student to take the California State Smog Test. Helps prepare student to take the ASE A-6, A-8, and L-1 tests. Elements of class are mandated by the California Department of Consumer Affairs Bureau of Automotive Repair and are subject to periodic change and addition by that agency. Not open to students who have taken the equivalent courses, AUTO B65a and/or AUTO B65b.

**Hours:** 54 lecture, 54 laboratory

**CCS:** Credit course

**Transferable:** Associate Degree only. Not transferable.

### **AUTO B64 Auto Electricity and Electronics**

*4 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Fundamentals of automotive electronics and electrical

components including ignitions, computers, batteries, alternators, and starters. Laboratory emphasis on testing and servicing of electrical equipment. Prepares for ASE A6 exam.

**Hours:** 54 lecture, 54 laboratory

**CCS:** Occupational Education

### **AUTO B75A Introduction to Engine Overhaul**

*3 units*

**Recommended:** AUTO B1ab

**Description:** This course covers the acquisition of basic, practical skills required for accurate internal combustion engine diagnosis, repair and all phases of engine rebuilding machine work. Demonstrated lecture, simulated problem diagnosis and practical application on live vehicles will be used. Individual instruction on engine rebuilding machinery & tools is an integral part of this course. Preparation for the A1 and A8 ASE exams will be covered. Theory of internal combustion, piston-type engine design and maintenance. Practice in engine overhaul procedures and mechanical problems diagnosis.

**Materials Fee:** \$15.00

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **AUTO B75B Engine Repair Techniques**

*3 units*

**Prerequisites:** AUTO B75a with a grade of 'C' or higher.

**Description:** This course covers the acquisition of advanced skills required for accurate internal combustion engine diagnosis, repair and all phases of engine rebuilding machine work. Demonstrated lecture, simulated problem diagnosis and practical application on live vehicles will be used. Preparation for the A1 and A8 ASE exams will be covered. Theory of internal combustion, piston-type engine design and maintenance. Practice in engine overhaul procedures and mechanical problems diagnosis.

**Materials Fee:** \$15.00

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **AUTO B75C Advanced Engine Overhaul**

*3 units*

**Prerequisites:** AUTO B75b 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 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **AUTO B75D Advanced Engine Machining**

*3 units*

**Prerequisites:** AUTO B75c with a grade of 'C' or better.

**Description:** Application of engine overhaul theory and procedures, including reassembly and initial startup procedures, is covered in this class. Individual instruction on advanced engine rebuilding machinery & tools is an integral part of this course. 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 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **AUTO B76 Performance Engine Building**

*2 units*

**Prerequisites:** AUTO B2a and AUTO B2b, or AUTO B75a, B75b, B75c, B75d all with grades of 'C' or better.

**Description:** Theory of high performance engines and machining skills necessary to modify stock production engines for maximum output. Test sessions at local racetrack will show applied theory and skills.

**Hours:** 18 lecture, 36 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **AUTO B90 Automotive Maintenance and Repair**

*6 units*

**Description:** Engine components, chassis, brake, air conditioning services and basic engine tune-up.

**Hours:** 48 lecture, 144 laboratory

**CCS:** Occupational Education

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

### **AUTO B106 Auto Brakes/Suspension/Steering/Alignment**

*9 units*

**Prerequisites:** AUTO B1ab, or AUTO B14, or AUTO B15, or AUTO B64, with grades of 'C' or better.

**Recommended:** Reading - one level prior to transfer

**Description:** A comprehensive course in automotive and light truck brakes, alignment, suspension, and steering systems. Designed to give students the skills and knowledge to diagnose and repair these systems to industry standards.

**Hours:** 108 lecture, 162 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **AUTO B112 Auto Transmission/Gear Boxes**

*9 units*

**Recommended:** Reading - one level prior to transfer

**Prerequisites:** AUTO B1ab, or AUTO B64a, or AUTO B14, or AUTO B15, with grades of 'C' or better.

**Description:** Automotive transmissions and transaxles, computer controls, 2, 3, and 4 speed transmissions, override, and all related components. Also covers standard transmissions and transaxles, clutches, "U" joints, differentials, and all related components.

Successful completion should enable student to pass the National Institute of Service Excellence test.

**Note:** Not open to students who have received a satisfactory grade in both AUTO B12a and AUTO B112b.

**Hours:** 108 lecture, 162 laboratory

**CCS:** Credit Status

**Transferable:** Associate Degree only. Not transferable.

## **Biology Courses**

### **BIOL B3A General Biology I**

*5 units*

**Prerequisites:** MATH BD or MATH B70 with a grade of 'C' or better and Reading - one level prior to transfer.

**Description:** Introductory course for students majoring in the

biological sciences or pursuing pre-professional programs of study such as pre-medical, pre-pharmacy, pre-dentistry. Emphasizes scientific processes and methods of biology including original research. Explores unifying principles of micro- and macro-evolutionary processes, biodiversity of organisms, systematics, principles of ecology, animal behavior and plant biology. Field trips required.

**Hours:** 54 lecture, 108 laboratory

**CCS:** Liberal Arts/Science

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

### **BIOL B3B General Biology II**

*5 units*

**Prerequisites:** CHEM B1a 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 laboratory

**CCS:** Liberal Arts/Science

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

### **BIOL B7 Environmental Biology**

*4 units*

**Prerequisites:** Reading - one level prior to transfer.

**Description:** Introduction to environmental science with major consideration given to the processes that sustain human life on this planet. Topics include: the relevance of ecology to human affairs; current biological and physical environmental issues; population ecology; biogeochemical cycles; ecosystems and biodiversity including introduced and endangered species; energy flow through ecosystems; pollution and wastes; global changes; environmental economics and ethics; and potential ecological effects on the future of the planet.

**Hours:** 54 lecture, 54 laboratory

**CCS:** Liberal Arts/Science

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

### **BIOL B11 Concepts of Biology**

*4 units*

**Prerequisites:** Reading - one level prior to transfer.

**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.

**Note:** Field trips may be required.

**Hours:** 54 lecture, 54 laboratory

**CCS:** Liberal Arts/Science

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

### **BIOL B16 General Microbiology**

*5 units*

**Prerequisites:** Reading - one level prior to transfer and BIOL B3A or BIOL B3B or BIOL B20 or BIOL B32 or BIOL B33 AND CHEM B1A or CHEM B11 or CHEM B18 with grades 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 laboratory

**CCS:** Credit Course

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

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

*4 units*

**Prerequisites:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Liberal Arts/Science

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

### **BIOL B20 Human Biology**

*4 units*

**Prerequisites:** Reading - one level prior to transfer.

**Description:** An introductory biology course designed specifically for non-science majors, covering basic chemical principles of life, cell and tissue structure and function, human anatomy and physiology, health aspects, and genetics. Topics include evolution, population growth and environmental impact on humans. Field trips required.

**Hours:** 54 lecture, 54 laboratory

**CCS:** Liberal Arts/Science

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

### **BIOL B21 Special Projects in Biology**

*0.5-2 units*

**Prerequisites:** Any college biology course with grades of 'C' or better and Reading - one level prior to transfer.

**Repeat:** 3 or until a limit of 4 units is reached.

**Description:** Individually directed work in biology laboratory.

Students will learn biological preparation, and/or development of teaching materials while assisting in a biology laboratory.

**Hours:** 27 for each .5

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **BIOL B32 Human Anatomy and Physiology I**

*4 units*

**Prerequisites:** Reading - one level prior to transfer.

**Description:** This is the first part of a two-semester integrated anatomy and physiology course providing the necessary foundation required for BIOL B33. The course covers the principles of human anatomy and physiology, emphasizing the integration of structure, function, and maintenance of homeostasis. Topics are anatomical terminology, body chemistry, histology, articulations, and the following systems: integumentary, skeletal, muscular, central and peripheral nervous, and special senses. Both BIOL B32 and BIOL B33 must be taken to study all the major body systems. This series meets the diverse needs of students seeking careers in such allied health fields as nursing, pharmacy, and physician's assistant.

**Hours:** 54 lecture, 54 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges



**BIOL B33 Human Anatomy and Physiology II***4 units***Prerequisites:** 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: Replaces both BIOL B14 - Anatomy and BIOL B15 - Physiology.

**Hours:** 54 lecture, 54 laboratory**CCS:** Liberal Arts/Science**Transferable:** UC, CSU and private colleges; IGETC 5.B; IGETC 5.C; CSU GE B.2; BC GE B.1**BIOL B34 Pathophysiology***3 units***Prerequisites:** BIOL B32 and BIOL B33, or an older BIOL B14 - Anatomy and BIOL B15 - Physiology series, all with grades of 'C' or better.

**Description:** The study of the basic principles and processes of diseases within the human body using background information from anatomy, physiology, and chemistry. Topics include basic disease mechanisms as well as the etiology and pathogenesis of disorders by body system. Diagnostic procedures, preventative measures, and examples of current therapeutic practices are also explored.

**Hours:** 54 lecture**CCS:** Liberal Arts/Science**Transferable:** CSU and private colleges**Business Administration Courses****BSAD B1 Financial Accounting***4 units***Prerequisites:** Mathematics - one level prior to transfer, or MATH BD/MATH B70 and ACDV B50 or Reading - one level prior to transfer 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**CCS:** Occupational Education**Transferable:** UC, CSU and private colleges**BSAD B2 Managerial Accounting***3 units***Prerequisites:** BSAD B1 with grades 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**CCS:** Occupational Education**C-ID:** ACCT 120**Transferable:** UC, CSU and private colleges**BSAD B5 Human Relations/People Skills***3 units***Recommended:** Reading - one level prior to transfer. Writing - two levels prior to transfer.

**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**CCS:** Occupational Education**Transferable:** CSU and private colleges**BSAD B9 Fundamentals of Marketing***3 units***Recommended:** Reading - one level prior to transfer

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

**Note:** Elective credit only.**Hours:** 54 lecture**CCS:** Occupational Education**Transferable:** CSU and private colleges**BSAD B18 Business Law***3 units***Recommended:** Reading - one level prior to transfer.

**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**CCS:** Occupational Education**Transferable:** UC, CSU and private colleges**BSAD B19 Business Law: Business Entities and Estates***1 unit***Recommended:** Reading - one level prior to transfer.

**Description:** This course will cover business organizations including sole ownership, partnerships, and corporations. It will also include discussions of wills and trusts. Business students transferring to CSUB are advised to take this course in addition to BSAD B18 to match CSUB's ACC 275.

**Hours:** 18 lecture**CCS:** Occupational Education**Transferable:** CSU and private colleges**BSAD B20 Introduction to Business***3 units***Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

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

### **BSAD B40 Personal Finance**

*3 units*

**Recommended:** Reading - one level prior to transfer. Mathematics - two levels prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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.

**Note:** For elective credit only.

**Hours:** 54 lecture

**CCS:** Occupational Education

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

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

*3 units*

**Recommended:** Reading - two levels prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

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

*3 units*

**Prerequisites:** BSAD B53a with 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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **BSAD B54 Payroll Accounting**

*3 units*

**Prerequisites:** BSAD B53a or BSAD B1 with grades 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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

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

*3 units*

**Prerequisites:** BSAD B1 or BSAD B53b 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

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Comprehensive study and review of human resources management. Focuses 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. Course also emphasizes federal, state and local laws as they apply to employers and employees in both the private and public sector.

**Formerly:** MGMT B41 and MGMT B61

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

**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**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**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**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**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**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**BSAD B91 E-Commerce***1 unit*

**Description:** Introduces students to E-Commerce basics. Emphasis is placed on exploring marketing issues, payment processing, collections, security, and customer service.

**Hours:** 18 lecture**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**BSAD B250 Quick Computer Keyboarding for Survival***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. Open entry/ open exit course with individualized instruction in a supervised laboratory.

**Formerly:** BUS B252a.**Note:** Not open to students who have taken BSAD B252a.**Hours:** 30 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**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 laboratory**Transferable:** Associate Degree only. Not transferable.**BSAD B252B Computer Keyboarding, Part 2***1 unit***Prerequisites:** BSAD B252a 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 laboratory.

**Hours:** 54 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**BSAD B252C Computer Keyboarding, Part 3***1 unit***Prerequisites:** BSAD B252b 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 laboratory.

**Hours:** 54 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**BSAD B253A Document Processing, Part 1***1 unit***Prerequisites:** BSAD B252c with at least a grade of C.

**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 laboratory.

**Hours:** 54 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**BSAD B253B Document Processing, Part 2***1 unit***Prerequisites:** BSAD B253a with a grade of C.

**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 laboratory.

**Hours:** 54 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**BSAD B253C Document Processing, Part 3***1 unit***Prerequisites:** BSAD B253b with a grade of C.

**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 laboratory.

**Hours:** 54 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory

**Hours:** 27 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **BSAD B280 Machine Transcription**

*1.5 units*

**Prerequisites:** BSAD B252c with a grade of 'C' or equivalent and BSAD B85 or BSAD B285 or equivalent.

**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 laboratory.

**Hours:** 81 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory.

**Hours:** 81 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## **Chemistry Courses**

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

*5 units*

**Prerequisites:** Reading- one level prior to transfer. CHEM B2a with a grade or C or better or high school chemistry; MATH BD/MATH B70 with a grade of 'C' or better or 2 years of high school algebra.

**Recommended:** Prerequisites should be completed within 2 years

of the course to enable success.

**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 laboratory emphasizes quantitative methods.

**Hours:** 54 lecture, 108 laboratory

**CCS:** Liberal Arts/Science

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

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

*5 units*

**Prerequisites:** CHEM B1a 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 laboratory includes qualitative analysis, quantitative techniques, and descriptive experiments.

**Hours:** 54 lecture, 108 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **CHEM B2A Introductory General Chemistry**

*4 units*

**Prerequisites:** MATH BA/MATH B60 with a grade of 'C' or better and reading - one level prior to transfer.

**Recommended:** Math prerequisite accomplished within the two previous years.

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

**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.

**Hours:** 54 lecture, 54 laboratory

**CCS:** Liberal Arts/Science

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

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

*5 units*

**Prerequisites:** MATH BA/MATH B60 or equivalent with grade of 'C' or equivalent. Reading - one level prior to transfer.

**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, composition, reactions, nomenclature; biochemistry-classification, composition, reactions in living organisms.

**Hours:** 54 lecture, 108 laboratory

**CCS:** Liberal Arts/Science

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

### **CHEM B18 Elementary Organic Chemistry**

*5 units*

**Prerequisites:** CHEM B1a with a grade of 'C' or better, or CHEM B2a with a grade of B or better, or evaluation by instructor of students skills and knowledge.

**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 laboratory covers fundamental techniques including separations, synthesis, identification, and instrumental analysis.

**Hours:** 54 lecture, 108 laboratory

**CCS:** Liberal Arts/Science

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

### **CHEM B30A Introductory General Chemistry, I**

*5 units*

**Prerequisites:** 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 laboratory 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 laboratory

**CCS:** Credit Course

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

### **CHEM B30B Introductory General Chemistry, II**

*5 units*

**Prerequisites:** 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 laboratory

**CCS:** Credit Course

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

## **Child Development Courses**

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **CHDV B20 Principles and Practices**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**C-ID:** ECE 120

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** CHDV B20. Reading - one level prior to transfer.

**Description:** Interdisciplinary study of physical, 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

**CCS:** Occupational Education

**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:** CHDV B21 with a grade of C or better and Reading - one level prior to transfer.

**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

**CCS:** Credit Course

**C-ID:** ECE 200

**Transferable:** UC, 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.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**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.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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 numbers 4-7.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Prerequisites:** CHDV B20 and CHDV B21 and CHDV B42 and CHDV B36 with grades of 'C' or better.

**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:** Course combines the previous CHDV B41 and CHDV B41l – formerly CHDV B41a or CHDV B41b plus CHDV B41al or CHDV B41bl.

**Hours:** 18 lecture, 108 laboratory

**CCS:** Credit Course

**C-ID:** ECE 210

**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.

**Hours:** 54 lecture

**CCS:** Occupational Education

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

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Credit Course

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** CHDV B41a and CHDV B41b with grades of C.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges, elective credit only

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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.

**Hours:** 54 lecture

**CCS:** Occupational Education

**C-ID:** ECE 220

**Transferable:** CSU and private colleges, elective credit only; CSU GE E

### **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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## CHDV B53A Early Childhood Education: Adult Supervision

2 units

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## CHDV B67 The School Age Child

3 units

**Recommended:** Reading - one level prior to transfer.

**Description:** Social, emotional, physical and cognitive development of the child through the preadolescent years, including planning curriculum and structuring the environment and classroom activities for each stage.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## Communication Courses

### COMM B1 Public Speaking

3 units

**Recommended:** Writing - one level prior to transfer. Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** An introduction to interpersonal communication as it pertains to romantic, friendship, family, and professional relationships. Emphasis will be put on social and cultural influences 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

**CCS:** Liberal Arts/Science

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

### COMM B4 Persuasive Communication

3 units

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Principles and practices of persuasion in various

communication settings. Prepare and deliver persuasive speeches for specific audiences.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer.

**Description:** Study of basic theory and skills of intercultural communication. Emphasis is given to communicating effectively in diverse social and professional environments. Focus will also be given to the analysis and comparisons of message perception and transmission in interactions between people from different cultures. Practical application of these skills will also be highlighted.

**Hours:** 54 lecture

**CCS:** Credit Course

**C-ID:** COMM 150

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

### COMM B7 Organizational Communication

3 units

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

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

### COMM B8 Small Group Communication

3 units

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **COMM B10 Leadership and Communication**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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 with credit in COMM B49b or COMM B49, Leadership and Communication.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **COMM B21 Oral Interpretation**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**C-ID:** COMM 170

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

### **COMM B49C Political Communication: The Presidential Election**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Course designed to help students understand and appreciate the unique communication strategies and events that are only present in the Presidential Election Process. Course examines theories and practices of political communication during presidential elections. Students will focus on methods that candidates, parties, and stakeholders use to communicate political messages. Students will examine the use of both traditional media and emerging technologies in contemporaneous political campaigns. Students will also analyze and criticize candidate speeches and debate performances.

**Note:** Offered every 4 years in the fall semester to coincide with the Presidential General Election.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

## **Computer Science Courses**

### **COMP B2 Introduction to Computer Information Systems**

*3 units*

**Prerequisite:** Reading - one level prior to transfer

**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 previously received credit for COMS B2, COMS B3, COMP B3.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **COMP B3 Computer Concepts & Survival Skills**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** An introduction to computers and computer information systems as problem-solving and personal productivity tools. The focus of the course is to provide the practical computer skills and computer literacy that most computer users need to succeed in school, business and other endeavors. Topics include: networking and the Internet, e-commerce, ethical and societal implications of computer use, security, computer hardware and software. Emphasis is placed on hands-on projects that enhance productivity. Examples of these include: word processing, spreadsheets, backup, anti-malware, communications, multimedia and presentation, Email, web-based research, and operating systems.

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

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **COMP B5 Introduction to Microsoft Office**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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 completed COMS B5.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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:** Students who have taken COMS B10 may not find benefit in taking this course. Please consult the department before enrolling.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **COMP B11 Programming Concepts and Methodology I**

*3 units*

**Recommended:** COMP B10 or Approval by Instructor.

**Prerequisite:** Reading - one level prior to transfer and Mathematics - one level prior to transfer .

**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 previously received credit for COMS B14.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** UC, CSU and private colleges

### **COMP B12 Programming Concepts and Methodology II**

*3 units*

**Prerequisite:** COMP B11 with a grade of 'C' or better

**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 previously received credit for COMS B35.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** UC, CSU and private colleges

### **COMP B13 Computer Architecture and Organization**

*3 units*

**Recommended:** 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.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **COMP B14 Discrete Structures**

*3 units*

**Prerequisite:** COMP B11 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.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** UC, CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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 completed COMS B34.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **COMP B32 CompTIA Linux+**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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 completed COMS B41.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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 completed COMS B82.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** UC, CSU and private colleges

### **COMP B41 Web Design: Design Tools**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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.

**Note:** Not open to students who have completed COMS B74a.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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.

**Note:** Not open to students who have completed COMS B74b.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **COMP B43 Web Design: JavaScript**

*3 units*

**Prerequisite:** COMP B42 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.

**Note:** Not open to students who have previously received credit for COMS B74c.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **COMP B72 Applied Software Design**

*3 units*

**Prerequisite:** COMP B10, COMP B11 and COMP B21 with grades 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

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **COMP B84 COMPTIA A+**

*4 units*

**Recommended:** Reading - one levels prior to transfer.

**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 troubleshooting using various diagnostic tools and methods employed in industry.

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

**Hours:** 54 lecture, 54 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

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

*3 units*

**Prerequisite:** COMP B42 with a grade of 'C' or better, or assessment of student's HTML and CSS skills and knowledge by the instructor.

**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.

**Note:** Not open to students who have previously received credit for COMS B75c.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

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## **Construction Technology Courses**

### **CNST B1 Introduction to Construction**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **CNST B2 Estimating and Scheduling**

*3 units*

**Recommended:** CNST B1 with a grade of 'C' or better, or one year work experience in the construction related industry. Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **CNST B50A Residential Construction**

*7 units*

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **CNST B50B Residential Construction**

*7 units*

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## **Correctional Administration Courses**

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

*7 units*

**Description:** Provides the student with necessary knowledge and skills required to effectively supervise inmates in a correctional setting. Designed to comply with the Corrections Standards Authority in the Standards and Training for Corrections Basic Core Course. Covers professionalism, ethics, laws, custody, and supervision of inmates, demonstrated skills in handling of contraband, restraint techniques, cell extractions, weaponless defense, physical conditioning, first aid, and CPR.

**Hours:** 90 lecture, 118 laboratory

**Repeat:** 2

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **CADM B55 Deputy Probation Officer Core Course**

*3.5 units*

**Description:** Introductory probation officer training providing the necessary knowledge and skills required for entry level deputy probation officers. Designed to comply with the State of California, Board of Corrections, Standards and Training for Corrections (STC). Covers professionalism, ethics, introduction to the criminal justice system, laws, confidentially, juvenile detention, case information and problem identification, interviewing, restitution, report writing, casework, counseling, monitoring and supervising offenders, officer safety and defensive tactics, physical skills, responding to probationer performance, CPR.

**Repeat:** 2

**Hours:** 140 lecture, 36 laboratory

**CCS:** Occupational Education

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

### **CADM B56 Special Topics**

*0.2-3 units*

**Description:** Various mandated training topics required by Standards and Training in Corrections (STC) from the California Board of Corrections.

**Hours:** 8 lecture hours for each .2 unit (8-120)

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B57 Juvenile Institutions Officer Core Course**

*6 units*

**Description:** Designed to meet the requirements for entry-level staff for employment in a juvenile correctional institute. Written to comply with the State of California, Board of Corrections, Standards and Training for Corrections (STC).

**Hours:** 116.5 lecture, 51.5 laboratory

**Repeat:** 2

**CCS:** Occupational Education

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

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

*3 units*

**Description:** Provides the STC training curriculum for newly promoted corrections supervisors. Includes supervisory role identification, leadership style, values, ethics, principles, assertive leadership, employee performance appraisals, liability issues and legal updates, discipline, employee counseling, investigations, report review, and team building. Meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Repeat:** Unlimited

**Hours:** 56 lecture, 24 laboratory

**CCS:** Occupational Education

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

### **CADM B70A Prisoner Transportation**

*0.2 unit*

**Description:** Intended for peace officers, correctional officers, juvenile institutions staff and probation officers. Covers various modes of prisoner transportation, the risks involved, and how to achieve a secure transportation, including the application and use of mechanical restraints. This course meets the training requirements as set forth by the Corrections Standards and Training for Corrections Program.

**Hours:** 7 lecture, 1 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B70B Prison Gangs**

*0.2 unit*

**Description:** Intended for people working in law enforcement and corrections. 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:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B70C Escape Prevention**

*0.2 unit*

**Description:** Intended for people working in corrections. Covers escape prevention procedures that deal primarily with basic institutional security principles, accountability of inmates, human error, and techniques used for escape prevention. Meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Programs

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B70D Suicide Prevention**

*0.2 unit*

**Description:** Designed for students who work in corrections. Covers identifying the potential for suicide, prevention techniques, intervention and responses including proper communication techniques during a crisis. Meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**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. Meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 4 lecture, 4 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Designed for students who work in law enforcement/ corrections. Identifies Sexual harassment from a legal, moral, and social concept. Provides advice and counsel on how to prevent sexual harassment in the workplace. Meets the training requirements as set forth by the Corrections Standards authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B70G Understanding Prejudice**

*0.2 unit*

**Description:** Intended for people working in law enforcement and

corrections. Teaches tolerance of others who are unlike oneself, to make allowances for cultural differences, values and beliefs. Adjusts preconceptions and misconceptions, attitudes and encourages communication styles without implications of discrimination. Meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Intended for correctional officers, juvenile institutions staff and probation officers. Provides the required competencies to identify a crime scene, preserve evidence, mark and collect physical, trace and transient evidence. Meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 6 lecture, 2 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B70I Anger Management**

*0.2 unit*

**Description:** Intended for people working in law enforcement and corrections. Designed to provide students with tools to control their own anger as well as provide a process to deal with angry people. Meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Designed for students who work in corrections. Provides the communication tools and legal framework necessary for successful implementation, use and protection of informants in a correctional institution. This course meets the training requirements as set forth by the Corrections Standards authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B70K Anatomy of a Set-Up: How Inmates Manipulate Correctional Staff**

*0.2 unit*

**Description:** Provides training to corrections staff on theories of crime, criminal thinking and behavior, how inmates will select, test and attempt to manipulate staff. Identifies the signs that contribute to and make employees receptive to a set up and con games. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Designed for students who work in corrections. 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:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Provides training to law enforcement, corrections and security officers (also recommended for educators). Prepares students to identify specific illicit drugs and the signs and symptoms of drug use and influence. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training Corrections Program.

**Hours:** 7 lecture, 1 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**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:** 5 lecture, 3 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B70O Positive Inmate Staff Relations through Communication and Ethics**

*0.2 unit*

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

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B70P Emergency Procedures**

*0.2 unit*

**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:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** 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. Designed for the correctional officer who supervises such inmates. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Designed for students who work in corrections. Explores the history of women in corrections and the career developments for women that have evolved in the field of corrections. Other topics include: special training needs, problems and restrictions placed on women, developing a mentoring program for female correctional staff. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Primarily designed for students who work in corrections. Learn how to prevent the transmission of blood borne pathogens; identify Tuberculosis awareness factors; recognize and deal with psychotic inmates. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Designed for students who work in corrections. Covers Conflict Resolution: develop skills to defuse and deescalate confrontational situations. Teaches: 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:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Provides training for corrections staff. Develops and enhances the knowledge and skills of searching both inmates and facilities. Covers searching techniques, clothed and unclothed body searches, and the current trends of introduction of contraband into a facility. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 6 lecture, 2 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Provides explanation and hands-on practice for the proper application and use of restraint gear. Explains how some gear can be slipped, picked, shimmed or broken. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 4 lecture, 4 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B70X Cell Extraction**

*0.2 unit*

**Description:** Designed for correctional staff. 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:** 6 lecture, 2 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 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 counties participating in the Standards and Training for Corrections Program.

**Hours:** 7 lecture, 1 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71A Basic Principles of Management**

*0.4 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:** 12 lecture, 4 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71F Drug and Alcohol Awareness for Supervisors**

*0.2 unit*

**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. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 7 lecture, 1 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71G Advanced Report Writing**

*0.2 unit*

**Description:** Provides written communication training to corrections line staff and first line supervisors. Course will provide examples and an opportunity to practice report writing. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

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

**Hours:** 4 lecture, 4 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71H Transportation/Escape Procedures**

*0.2 unit*

**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:** 6.5 lecture, 1.5 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71I Violence in the Workplace**

*0.2 unit*

**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:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71K Rights of Prisoners**

*0.2 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:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71L Progressive Discipline**

*0.2 unit*

**Description:** Intended for people working in corrections. Teaches method of Progressive Discipline utilized in a correctional setting to ensure uniform consistency, avoid confusion, follow due process requirements, and create a positive behavior change among inmates. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 6 lecture, 2 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71M Stress in the Corrections Environment**

*0.2 unit*

**Description:** Intended for people working in corrections. Identifies stress, how it affects both the physical and mental health of individuals. Topics include identifying symptoms of stress, recognizable physical and psychological reactions to stress, and stress reducers/relaxation techniques. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 7 lecture, 1 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71N Positive Thinking in Corrections**

*0.2 unit*

**Description:** Intended for people working in corrections. 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:** 6 lecture, 2 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71O Assertiveness Training for Corrections**

*0.2 unit*

**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 Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 6 lecture, 2 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B71P Employee Post Trauma**

*0.2 unit*

**Description:** Intended for people working in corrections. Covers basic assessment tools, methods of coping, as well as tools and skills to facilitate post traumatic recovery. Course meets the Standards and Training for Corrections Program.

**Hours:** 6 lecture, 2 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Intended for people working in corrections. 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:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**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:** 8 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B72 Chemical Agents**

*0.2 unit*

**Description:** Intended for peace officers, correctional officers, juvenile institutions staff and probation officers. Provides the required competencies and certification for the use of chemical agent sprays. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 6 lecture, 2 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**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:** 2 lecture, 6 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Provides training to law enforcement, corrections and security officers to perform their daily tasks with less danger to themselves and to increase their ability to control suspects and prisoners in a humane and lawful manner. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

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

**Hours:** 2 lecture, 6 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**Description:** Provides training to law enforcement, corrections staff and security officers. Teaches responses to the mounting threat of knife culture offenses. Topics covered include safe positioning, communicating commands to inmates, how to assess an edged weapon assailant, evasive defensive tactics and disarming techniques. This course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 3 lecture, 5 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.2 unit*

**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.

**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:** 4 lecture, 4 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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

*0.4 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.

**Note:** Per Penal Code section 13511.5, students must obtain written clearance from the California Department of Justice verifying that

they are not prohibited from possessing firearms.

**Hours:** 8 lecture, 8 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B78 Less Lethal/Specialty Impact Weapons**

*0.2 unit*

**Description:** Provides training to law enforcement, corrections and security officers in the proper, safe, legal, technical and practical use of less lethal/specialty impact weapons. A demonstration of such weapons and munitions will be conducted. Course meets the training requirements as set forth by the Corrections and Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** .2 lecture, 4 lab, 4 supervised tutoring

**Repeat:** unlimited

**CCS:** Occupational Education

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

### **CADM B79 Emergency Response Team Training**

*1.5 units*

**Description:** Provides training for newly appointed officers to a Correctional Emergency Response Team (CERT). Covers the duties of a CERT team member including transport of high risk inmates, extracting uncooperative prisoners from their cells, searches, high profile security, barricaded persons, mass arrest and responding to hostages situations. Course meets the training requirements as set forth by the Corrections Standards Authority for counties participating in the Standards and Training for Corrections Program.

**Hours:** 24 lecture, 56 laboratory

**Repeat:** unlimited

**CCS:** Occupational Education

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

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## **Criminal Justice Courses**

### **CRIM B1 Introduction Criminal Justice**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Occupational Education

**C-ID:** SOCI 160

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

### **CRIM B2 Criminal Law**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Occupational Education

**C-ID:** AJ 120

**Transferable:** UC, CSU and private colleges



**CRIM B3 Introduction to Evidence***3 units***Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.**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**CCS:** Occupational Education**C-ID:** AJ 124**Transferable:** CSU and private colleges**CRIM B4 Constitutional Criminal Procedure***3 units***Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.**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**CCS:** Occupational Education**Transferable:** CSU and private colleges**CRIM B5 Community Relations***3 units***Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.**Description:** The relationship of criminal justice agents and the community; causal and symptomatic aspects of community perceptions; lack of cooperation and trust; study of behavioral causes; strategies to develop and enhance multi-cultural awareness and harmonious relationships.**Hours:** 54 lecture**CCS:** Occupational Education**Transferable:** UC, CSU and private colleges; CSU GE D.10; BC GE D.2**CRIM B8 Criminal Investigation***3 units***Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.**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**CCS:** Occupational Education**C-ID:** AJ 140**Transferable:** CSU and private colleges**CRIM B9 Juvenile Justice System***3 units***Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.**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**CCS:** Occupational Education**C-ID:** AJ 220**Transferable:** CSU and private colleges**CRIM B10 Organized Crime***3 units***Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.**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**CCS:** Occupational Education**Transferable:** CSU and private colleges**CRIM B12 Forensic and Scientific Aspects of Evidence***3 units***Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.**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**CCS:** Occupational Education**C-ID:** AJ 150**Transferable:** CSU and private colleges**CRIM B21 Introduction to Correctional Administration***3 units***Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.**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**CCS:** Occupational Education**Transferable:** CSU and private colleges**CRIM B22 Institutional Supervision and Treatment of the Offender***3 units***Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.**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**CCS:** Occupational Education**Transferable:** CSU and private colleges**CRIM B23 Fundamentals of Interviewing and Counseling***3 units***Recommended:** Reading - one level prior to transfer. Writing - one

level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

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

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **CRIM B50 Criminal Justice Report Writing**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **CRIM B55 Special Topics in Criminal Justice**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Contemporary issues and controversies associated with crime and the criminal justice system are among the special topics to be explored.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **CRIM B60 Legal Aspects of Corrections**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## **Crop Science Courses**

### **CRPS B1 Principles of Crop Production**

*3 units*

162

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **CRPS B3 Integrated Pest Management**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer and Mathematics - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **CRPS B4 Vegetable Production**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** UC, CSU and private colleges

### **CRPS B10 Plant Biology**

*4 units*

**Recommended:** Reading - one level prior to transfer, Advisory Writing - 1 Level Prior to Transfer, and Mathematics - 2 Levels Prior to Transfer.

**Description:** An introductory course covering the fundamental principles of plant science with emphases on structure, function, reproduction, and development of seed plants. The principles will be related to the practices of applied plant biology in crop production, forestry, and horticulture. Not open to students who have taken BIOL B10.

**Hours:** 54 lecture, 54 laboratory

**CCS:** Credit Course

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

## 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 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### DANC B6JD Jazz Dance (PHED B6JD)

*1 unit*

**Description:** Fundamental jazz dance techniques and fundamentals and terminology of ballet as they relate to jazz dance including warm-up exercises for the preparation of the human body as an instrument for dance. Different styles and rhythms of jazz dance and music for jazz dance will be introduced.

**Hours:** 36 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### DANC B6MD Modern Dance

*1 unit*

**Description:** Modern dance as a lifelong physiological, psychological and social activity. A coeducational course in which the student will learn warm-ups, techniques, experiences with movement improvisation and develop knowledge of the elements of dance composition.

**Hours:** 36 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

## Earth Science Courses

### ERSC B10 Introduction to Earth Science

*3 units*

**Prerequisites:** Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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 Laboratory

*1 unit*

**Prerequisites:** ERSC B10 (with minimum grade of 'C', may be taken concurrently).

**Description:** Earth Science laboratory 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 laboratory

**CCS:** Liberal Arts/Science

**C-ID:** GEOL 120L

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

## Economics Courses

### ECON B1 Principles of Economics-Micro

*3 units*

**Recommended:** Reading - one level prior to transfer, writing - one level prior to transfer, and MATH B70.

**Prerequisites:** MATH B60 or equivalent introduction to algebra course with a grade of 'C' or better or Mathematics - 1 Level Prior to Transfer.

**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

**CCS:** Liberal Arts/Science

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

### ECON B2 Principles of Economics-Macro

*3 units*

**Recommended:** Reading - one level prior to transfer, writing - one level prior to transfer, and MATH B70.

**Prerequisites:** MATH B60 or equivalent introduction to algebra course with a grade of 'C' or better or Mathematics - 1 Level Prior to Transfer.

**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

**CCS:** Liberal Arts/Science

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

## Education Courses

### EDUC B24 Early Field Experience for Elementary

#### Teachers

*3 units*

**Recommended:** Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

## Electronics Technology Courses

### ELET B1 Basic Electronics (DC and AC)

4 units

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### ELET B4 Computer Integrated Manufacturing

3 units

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

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### ELET B5 Programmable Logic Controllers

3 units

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### ELET B6 Analog and Digital Electronics

3 units

**Prerequisites:** ELET B1 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### ELET B5A Electric Motors - Controls

4 units

**Prerequisites:** ELET B1 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**Repeat:** 1

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### ELET B56 Instrumentation and Process Control

3 units

**Prerequisites:** ELET B1 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### ELET B58 Advanced Programmable Logic Controllers

3 units

**Prerequisites:** 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.

**Transferable:** Associate Degree only. Not transferable.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

### ELET B61 Telecommunications

3 units

**Prerequisites:** ELET B1 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### ELET B62 Radio Communications

3 units

**Prerequisites:** ELET B1 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### ELET B63 Electronic Systems Installation

3 units

**Prerequisites:** ELET B1 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## ELET B70 Mechanical Systems

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## Emergency Medical Technician Courses

### EMTC B50 Emergency Medical Technician I

*7.5 units*

**Prerequisites:** 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:** MEDS B60.

**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 county 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 laboratory section of the course. Any expenses involved in meeting the health requirements are the student's expense. Students who do not possess CPR will not be accepted into the class. 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:** \$27.00

**Hours:** 126 lecture, 27 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### 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:** \$27.00

**Hours:** 24 lecture

**Repeat:** Legally Mandated Training

**CCS:** Credit Course

## Engineering Courses

### ENGR B17 Introduction to Electrical Circuits

*3 units*

**Prerequisites:** PHYS B4b with a grade of 'C' or better.

**Recommended:** MATH B6d (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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### ENGR B17L Electric Circuit Laboratory

*1 unit*

**Prerequisites:** ENGR B17 with a grade of 'C' or better, may be taken concurrently.

**Description:** Experimental verification of the electric circuit laws including Ohms law, Kirchhoffs laws, network theorems, mesh and nodal analysis, Thevenin and Norton analysis, OP-amp circuits, sinusoidal RC, RL, RLC circuits, phasors, and ideal transformer. Use of electrical instruments and development of laboratory techniques.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### ENGR B19C Introduction to Programming Concepts and Methodologies for Engineers

*3 units*

**Prerequisites:** MATH B1B 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 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### ENGR B24 Engineering Graphics and Descriptive Geometry

*2 units*

**Prerequisites:** INDR B10, INDR B11, and MATH B1b with a grade of 'C' or higher.

**Description:** Orthographic projection, auxiliary views, sectioning, threads and fasteners, dimensioning, tolerance, and working drawing. Descriptive geometry used to obtain points, lines, planes, intersections, developments and spatial relationships. Instrument and computer aided drafting systems used as aid to visualization and design.

**Hours:** 18 lecture, 54 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **ENGR B36 Engineering Mechanics-Statics**

*3 units*

**Prerequisites:** PHYS B4a and MATH B6a with grades of 'C' or better.

**Description:** Principles of statics and their application to engineering problems, equilibrium of two-dimensional and three-dimensional systems of particles and rigid bodies. Concentrated and distributed force systems, structures, friction, virtual work and moments of inertia.

**Hours:** 54 lecture

**Transferable:** UC, CSU and private colleges

### **ENGR B37 Engineering Mechanics-Dynamics**

*3 units*

**Prerequisites:** ENGR B36 and MATH B6c with grades of 'C' or higher.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **ENGR B40 Surveying I**

*3 units*

**Prerequisites:** High school trigonometry, or TECM B52 with a grade of 'C' or better; or concurrent enrollment in MATH B1B.

**Recommended:** Reading - one level prior to transfer.

**Description:** Introduction to the techniques of calculation and survey instrument use in field measurements. Topics include measurements of distances, angles, and directions; differential leveling; traversing and traverse computations; total station instrument use and field procedure; coordinate geometry and area calculations; topographic surveys/mapping.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** UC, CSU and private colleges

### **ENGR B41 Surveying II: Construction Surveying**

*3 units*

**Prerequisites:** ENGR B40 with grade of 'C' or higher.

**Recommended:** Reading - one level prior to transfer.

**Description:** Construction surveying methods and computations. Study of the surveying procedures in construction, including volume computations, horizontal curves, reverse curves, vertical curves, staking, grading, profiles and cross sections. Instrument experience is emphasized with both use and care of electronic and mechanical surveying equipment. Introduction to global positioning systems and photogrammetry.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ENGR B45 Properties of Materials**

*3 units*

**Prerequisites:** CHEM B2A and PHYS B2A and MATH B1B or CHEM B1A and PHYS B4A and MATH B1A each 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. Laboratory

investigation of the physical properties of metals, wood, soils, concrete, and polymers.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **ENGR B47 Introduction to Engineering and Design**

*3 units*

**Description:** Introduction to the engineering profession and the engineering design process. Engineering Profession: Survey of engineering disciplines, functions, communications, and ethics. Includes development of a personal educational plan. Satisfies 0.5 unit educational planning requirement for graduation from Bakersfield College. Engineering Design: Introduction to the design process and some of the computational skills required to solve engineering problems. Students will work in teams to design, manufacture, and test products. Some training in the use of Excel to solve engineering problems.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **ENGR B60 Introduction to Robotics**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Introduction to the basic concepts and control application of robotics. The operation of different types of end actuators is covered along with robotic microcontrollers and basic system sensors. Basic programming techniques are covered.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## **English Courses**

### **ENGL B1A Expository Composition**

*3 units*

**Prerequisites:** English Level 6 – Transfer or ENGL B50 or ENGL B53 or ENSL B50 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

**CCS:** Credit Course

**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:** ENGL B1A 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

**CCS:** Liberal Arts/Science

**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:** ENGL B1A 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**CCS:** Liberal Arts/Science**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:** 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**CCS:** Credit Course**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***Recommended:** ENGL B1A**Prerequisites:** Writing - one level prior to transfer.**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**CCS:** Credit Course**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***Recommended:** ENGL B1A**Prerequisite:** Writing - one level prior to transfer.**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**CCS:** Liberal Arts/Science**Transferable:** UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2**ENGL B10 Introduction to Shakespeare***3 units***Recommended:** ENGL B1A**Prerequisites:** Writing - one level prior to transfer.**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**CCS:** Credit Course**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***Recommended:** ENGL B1A**Prerequisite:** Writing - one level prior to transfer.**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**CCS:** Liberal Arts/Science**Transferable:** UC, CSU and private colleges; BC GE C.2**ENGL B21 African-American Literature***3 units***Recommended:** ENGL B1A**Prerequisite:** Writing - one level prior to transfer.**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**CCS:** Liberal Arts/Science**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:** Reading - 1 Level Prior to Transfer or ENGL B50 or ENGL B53 or ENSL B50 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**CCS:** Credit Course**Transferable:** UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2**ENGL B27 The Bible as Literature***3 units***Recommended:** ENGL B1A**Prerequisites:** Writing - one level prior to transfer.**Description:** Interpretation and analysis of Old and New Testament genres: Narrative, poetry, drama, epistles, didactics, wisdom, and prophecy.**Hours:** 54 lecture**CCS:** Credit Course**Transferable:** UC, CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2**ENGL B28 Classical Mythology***3 units***Prerequisites:** Eligibility for ENGL B1a.**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

**CCS:** Liberal Arts/Science

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

### **ENGL B30A Survey of American Literature**

*3 units*

**Recommended:** ENGL B1A

**Prerequisites:** Writing - one level prior to transfer.

**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. Recommended as an elective for majors in the humanities, history or education.

**Hours:** 54 lecture

**CCS:** Credit Course

**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*

**Recommended:** ENGL B1A

**Prerequisite:** Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

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

### **ENGL B34 Introduction to Library Research**

*1 unit*

**Prerequisites:** Reading - one level prior to transfer. Writing - 1 Level prior to transfer.

**Description:** Lecture and hands-on research class which will develop a basic familiarity with libraries and information resources as a foundation for research needs. Students will learn about different types of information resources and different search methods in the library and online. Evaluation and ethical use of resources, both print and electronic, is emphasized.

**Hours:** 18 lecture

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **ENGL B41a Introduction to Creative Writing**

*3 units*

**Recommended:** ENGL B1A.

**Prerequisite:** ENSL B50 or ENGL B50 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

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **ENGL B50 Introduction to College Composition**

*4 units*

**Prerequisites:** ENGL B60 or ENSL B60 with a grade of 'C' or better or Writing - 1 Level Prior to Transfer.

**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

**CCS:** Credit Course

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

### **ENGL B53 Reading, Reasoning, and Writing**

*4 units*

**Prerequisites:** ACDV B68/ACDV B65 or ENSL B70 with a minimum grade of 'C' or English Level 4

**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

**CCS:** Credit Course

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

### **ENGL B60 Basic Writing Skills**

*4 units*

**Prerequisites:** English Level 4 or ENSL B70 or ACDV B68 or ACDV B65 or ENSL B3 with a minimum grade of 'C'.

**Description:** Review and application of fundamentals of standard English. Emphasizes sentence, paragraph, and short essay writing.

**Hours:** 72 lecture

**CCS:** Credit Course

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

## **English as a Second Language**

### **ENSL B21 Intermediate Pronunciation and Listening**

*3 units*

**Recommended:** ENSL B71CD

**Description:** Advanced pronunciation class for foreign students who are basically fluent in English, with emphasis on dialect or accents. This may include bicultural American students and foreign-born students.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **ENSL B22 Advanced Academic Communication**

*3 units*

**Recommended:** ENSL B21 with a grade of 'C' or better.

**Description:** Individual prescriptive training in listening pronunciation, pertaining to stress and intonation in spontaneous and formal speech samples.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **ENSL B31 Advanced Reading and Literature**

*3 units*

**Prerequisites:** ENSL B51 with a minimum grade of 'C', or placement based on the Bakersfield College English as a Second Language Placement Test.

**Description:** Reading course for advanced foreign/bilingual students which refines critical reading skills and vocabulary of college-level material in fiction and non-fiction.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

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

### **ENSL B50 Introduction to College Composition**

*4 units*



**Prerequisites:** ENSL B60 or ENGL B60 with a minimum grade of 'C' or CR, or placement based on the Bakersfield College English as a Second Language Placement Test.

**Description:** Composition course for foreign/bilingual students which provides extensive practice in rhetorical modes of composition and persuasion as well as comprehension and analysis of reading. Stresses both organization and in-depth essay development. Prepares students for ENGL B1a.

**Hours:** 72 lecture

**CCS:** Pre-collegiate basic skills

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

### **ENSL B51 High-Intermediate Reading and Vocabulary**

*4 units*

**Prerequisites:** ENSL B61 with a minimum grade of 'C', or placement based on the Bakersfield College English as a Second Language Placement Test.

**Description:** Recommended for international and multi-lingual students who need to improve reading comprehension and build vocabulary in English. Emphasis is on identifying main ideas, summarizing, making inferences, and developing vocabulary, using more complex academic reading selections than in ENSL B61.

**Hours:** 72 lecture

**CCS:** Pre-collegiate basic skills

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

### **ENSL B52 High Intermediate Reading and Vocabulary**

*3 units*

**Prerequisites:** Reading - two levels prior to transfer or ENSL B51

**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.

**Hours:** 54 lecture

**CCS:** Credit course

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

### **ENSL B60 Basic Writing Skills**

*4 units*

**Prerequisites:** ENSL B70 (formerly ENSL B3) or ACDV B68/ACDV B65 with a minimum grade of 'C', or placement based on the Bakersfield College English as a Second Language Placement Test.

**Description:** Writing course for international/multilingual students at the advanced level of English who require grammar and composition skills necessary to take essay exams, improve personal and professional writing, or prepare for ENSL B50 or ENGL B1a.

**Note:** Not open to students with credit in ENSL B2.

**Hours:** 72 lecture

**CCS:** Pre-collegiate basic skills

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

### **ENSL B61 Basic Reading and Vocabulary**

*4 units*

**Prerequisites:** Placement based on the Bakersfield College English as a Second Language Placement Test.

**Description:** Recommended for international and multilingual students who need to improve reading comprehension and build their vocabulary in English. Emphasis is on looking for main ideas, summarizing, making inferences, developing vocabulary, and using academic language.

**Note:** Identical to the non-credit course ENSL B61N.

**Hours:** 72 lecture

**CCS:** Pre-collegiate basic skills

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

### **ENSL B70 Grammar and Composition**

*4 units*

**Prerequisites:** ENSL B80 (formerly ENSL B55ab) with a minimum grade of 'C' or placement based on the Bakersfield College English as a Second Language Placement Test.

**Description:** Writing course for foreign/bilingual students at the high-intermediate level of English who require grammar and composition skills necessary to take essay exams, improve personal written communication, or prepare for ENSL B60.

**Note:** Not open to students who have taken ENSL B3.

**Hours:** 72 lecture

**CCS:** Pre-collegiate basic skills

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

### **ENSL B71CD Basic Listening and Speaking II**

*4 units*

**Prerequisites:** ENSL B71ab (with minimum grade of C) or placement based on the Bakersfield College English as a Second Language Placement Test.

**Description:** Improves the pronunciation, intonation, rhythm, and stress patterns of the non-native English speaking person. Aural comprehension in everyday conversational speech and classroom lectures will also be stressed.

**Note:** Identical to the non-credit course ENSL B17CN.

**Hours:** 72 lecture

**CCS:** Pre-collegiate basic skills

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

## **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

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **FIRE B2 Principles of Fire and Emergency Services Safety and Survival**

*3 units*

**Prerequisites:** FIRE B1 with a grade of 'C' or better.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **FIRE B3 Fire Command, Strategy, & Tactics**

*3 units*

**Prerequisites:** FIRE B1 with a grade of 'C' or better.

**Description:** Fundamentals of fire department organization, management, and resources, and the use of those resources to

control various emergencies. Field trips required.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **FIRE B4 Fire Behavior and Combustion**

*3 units*

**Prerequisites:** FIRE B1 with a grade of 'C' or better.

**Description:** Theory and fundamentals of how and why fires start, spread and are controlled; an in-dept study of fire chemistry and physics, fire burning characteristics of materials, extinguishing agents, and fire control techniques.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **FIRE B5 Fire Prevention**

*3 units*

**Prerequisites:** FIRE B1 with a grade of 'C' or better.

**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

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **FIRE B6 Fire Protection Equipment and Systems**

*3 units*

**Prerequisites:** FIRE B1 with a grade of 'C' or better.

**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

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **FIRE B7 Building Construction for Fire Protection**

*3 units*

**Prerequisites:** FIRE B1 with a grade of 'C' or better.

**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.

**Note:** elective credit only.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **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

**CCS:** Occupational Education

**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

**CCS:** Occupational Education

**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

**CCS:** Occupational Education

**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

**CCS:** Occupational Education

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **FIRE B25F Wildland Firefighter**

*4 units*

**Description:** Provides basic principles of wildland fire control. Prepares the student for entry level employment on a wildland hand tool fire crew. Meets the basic requirements for the U.S. Forest Service firefighter qualification system. Intended for students to pursue a career with a wildland fire suppression agency or for a specialty with a municipal fire control agency.

**Hours:** 74 lecture, 16 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **FIRE B25G Wildland Engine Firefighter**

*3 units*

**Description:** Prepares students to perform the duties of a wildland firefighter assigned to an engine company. Includes hose lays, types of attack with engines, backfiring equipment hand tools, self-contained breathing apparatus, map reading and communications. Course includes National Wildfire Coordinating Group curriculum. Prepares students for employment with wildland fire management agencies and municipal fire departments.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **FIRE B25H Wildland Fire Dispatcher**

*3 units*

**Description:** Provides the skills to perform entry level tasks within an all risk emergency dispatch system. Coursework includes D-105 Entry Level Dispatcher, D-110 Dispatch Recorder, and D-310 Dispatch Supporter. Subjects covered include: communications, logs and filing, maps, resource status, dispatching aircraft, processing weather, first response/initial attack dispatching, support for initial attack, expanded dispatch, demobilization, accident/ incident reporting, public information, resource order and process, forms and associated processes, and intelligence processing. Utilizes National Wildfire Coordinating Group curriculum. Prepares students for employment with wildland fire management agencies and municipal fire departments.

**Hours:** 54 lecture

**CCS:** Occupational Education

**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

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **FIRE B26D Interagency Incident Business Management**

*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:** 16 lecture

**CCS:** Occupational Education

**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

**CCS:** Credit Course

**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

**CCS:** Occupational Education

**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

**CCS:** Credit Course

**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

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **FIRE B27A I-200 Basic Incident Command System**

*1 unit*

**Description:** Provides the basic features of the Incident Command System. Topics include orientation, principles and features, organization, incident fatalities, incident resources, and common responsibilities. Intended for students to pursue a career with a wildland fire suppression agency or for a specialty with a municipal fire control agency.

**Hours:** 16 lecture

**CCS:** Occupational Education

**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

**CCS:** Credit Course

**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

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **FIRE B29 S-212 Wildland Fire Chain Saws**

*2 units*

**Description:** Prepares students to become a wildland 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

**CCS:** Credit Course

**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 laboratory

**CCS:** Credit Course

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

### **FIRE B50A Fire Command 2A-Command Tactics at Major Fires**

*2 units*

**Description:** Concepts and methods for Chief Officers to understand complex fire ground operations. Stresses the multiple company response and the efficient use of human and material resources in handling major structural fires. Accredited by the California Fire Service Training and Education System (C.F.S.T.E.S.) for Chief Officer certification.

**Hours:** 40 lecture

**CCS:** Credit Course

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

### **FIRE B50B Fire Command 2B-Scene Management at Major Incidents**

*2 units*

**Prerequisites:** FIRE B50A with a grade of 'C' or better or equivalent.

**Description:** Management techniques for Chief Officers to control major fire disasters. Techniques in developing and writing plans for fire disaster control and in managing local disasters. Accredited by the California Fire Service Training and Education System (CFSTES) for Chief Officer certification.

**Hours:** 40 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B50C Fire Command 2C-High Rise Fire**

*2 units*

**Description:** Command and control techniques used at the scene of an emergency by fire company officers. Emphasizes decision making, the act of commanding, personnel and organization structures and pre-planning for effective command performance particularly related to high-rise building emergencies. Includes a review of the Incident Command System instituted by the State of California Fire Services.

**Hours:** 40 lecture

**CCS:** Credit Course

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

### **FIRE B50D Fire Command 2D, Management of Large Scale Disasters**

*2 units*

**Description:** Essential management techniques for Chief Officers needed to control major disasters. Developing and writing plans for disaster control and managing local disasters emphasized. Accredited by the California Fire Service Training and Education System (C.F.S.T.E.S.) for Chief Officer certification.

**Hours:** 40 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B50E Fire Command 2E-Wildland Fire Tactics**

*2 units*

**Prerequisites:** Fire B50a with a grade of 'C' or better.

**Description:** California's wildland fire problem will be examined through wildland fire safety, weather effects, fuels, fire behavior, initial attack methods, using support equipment, including the use of topographic maps, strategy and tactics, and air attack operations. Accredited by the CFSTES Chief Officer certification requirements.

**Hours:** 36 lecture, 4 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B50F Fire Management 2A-Organizational Development and Human Relations**

*2 units*

**Prerequisites:** FIRE B51A with a grade of 'C' or better.

**Description:** This course provides information on the foundations of 1) individual behavior, personality and emotions, motivational concepts, individual decision making; 2) group behavior, work teams, group dynamics, group communication, conflict and negotiations, power and politics, leadership and creating trust; and

3) organizational structure, human resources policies and practices, organizational culture, and organizational change and development. Accredited by the California Fire Service Training and Education System (C.F.S.T.E.S.) for Chief Officer Certification.

**Hours:** 40 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B50G Fire Management 2B, Fire Service Financial Mgt**

*2 units*

**Description:** This course is designed to provide insight into the cyclical nature of budgeting and financial management. As a management course, the student will become familiar with essential elements of the financial planning, budget preparation, budget justification, and budget controls. Offered as a State Fire Marshal CFSTES class.

**Hours:** 40 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B50i Fire Management 2D-Master Planning**

*2 units*

**Prerequisites:** FIRE B50f with a grade of 'C' or better.

**Description:** Long-range fire protection planning. Emphasizes program planning, strategic planning, forecasting, systems analysis, systems design, research, networking policy analysis and plans and reports. Accredited by the California Fire Service Training and Education System for Chief Officer certification.

**Hours:** 36 lecture, 4 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B50j Fire Management 2E-Ethics and the Challenge of Leadership**

*2 units*

**Description:** In this course, the participant will correlate personal core values and characteristics to ethical decisions and behaviors. In addition, the participant will explore ethical and principle-centered leadership, including ethical systems, ethical dilemmas, and ethical decision-making models. The participant will also examine challenges and develop strategies for leading in public safety organizations serving diverse and dynamic communities. The participant will use a variety of learning modalities including case studies, video analyses, and critical thinking scenarios to explore ethics and the challenges of leadership. Accredited by the State Fire Marshal as a C.F.S.T.E.S. for Chief Officer certification.

**Hours:** 40 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B51A Fire Management 1A**

*2 units*

**Description:** Planning, operating and controlling the personnel functions necessary to become a company officer. Emphasizes training, counseling, managing the development of a firefighter, participating in departmental grievance procedures, managing discipline, morale, safety standards and diversity in the workplace. Recommend: reading level 1 This course is one in a series of State Fire Marshal classes required for certification as a fire officer. This course is AA/AS degree applicable, but is not transferable to a four year college.

**Hours:** 40 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B51B Fire Command 1A**

*2 units*

**Prerequisites:** FIRE B1 with a grade of 'C' or better.

**Description:** This course provides an introduction to the principles of command, an overview of the concepts of command safety and the risk management process, preincident planning considerations, command considerations at structure fire incidents, Company Officer initial actions at an incident including the development of incident priorities, strategy, and tactics, information on the roles and responsibilities of a Company Officer for post-incident actions. Each student will have the opportunity to gain experience in a controlled environment through structure fire incident simulations.

**Hours:** 38 lecture, 2 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable

### **FIRE B51C Fire Command 1B**

*2 units*

**Prerequisites:** FIRE B51b with a grade of 'C' or better.

**Description:** This class will provide information and knowledge in command and control techniques used at the scene of hazardous material incidents. Emphasizes acts of commanding, the authority or right to command, the personnel organization or area under incident commander and the performance requirements for Fire Service Officers.

**Hours:** 38 lecture, 2 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B51D Fire Prevention 1A**

*2 units*

**Description:** Basic skills and knowledge necessary for Fire Prevention Officer Level I. Legal responsibilities and authority, Occupancy Classification and building construction, egress requirements, fire resistive assemblies, general fire safety provisions, and general principles procedures of fire inspections.

**Hours:** 40 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B51E Fire Prevention 1B**

*2 units*

**Recommended:** FIRE B51d with a grade of 'C' or better.

**Description:** Basic fire prevention information for company officers so they may respond to a variety of fire prevention situations in a professional and effective manner. Meets NFPA 1031 Fire Inspection Professional Qualifications and California State Board of Fire Services Standards for Fire Prevention Officer 1B.

**Hours:** 40 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory 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

**CCS:** Credit Course

**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

**CCS:** Credit Course

**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

**CCS:** Credit Course

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

### **FIRE B51I Fire Prevention 1C**

*2 units*

**Prerequisite:** FIRE B51d, FIRE B51e with grades of 'C' or better.

**Description:** Special hazards associated with flammable and combustible liquids and gases. Topics include bulk storage and handling, transportation of flammable gases and liquids. Meets NFPA 1031 Fire Inspection Professional Qualifications and California State Board of Fire Services Standards for Fire Prevention Officer 1

**Hours:** 36 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B51J Fire Investigation 1B**

*2 units*

**Prerequisites:** FIRE B51f with a grade of 'C' or better.

**Description:** Continuation of FIRE B51f adds topics of discussion including the juvenile fire setter, report writing, evidence collection and preservation procedures. Course meets POST certification requirements.

**Hours:** 40 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory

**CCS:** Credit course

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B51L Fire Apparatus Driver Operator 1A**

*2 units*

**Prerequisite:** FIRE B62 or FIRE B63 with grades 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 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only

### **FIRE B51M Fire Apparatus Driver/Operation 1-B**

*2 units*

**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. Prerequisite: California driver's license, Class A, B or C, with a fire fighter endorsement.

**Hours:** 24 lecture, 16 laboratory

**CCS:** Credit Course

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

### **FIRE B59 Fire Service Hydraulics**

*2 units*

**Recommended:** MATH B50 with a grade of 'C' or better, or equivalent.

**Description:** Assist fire fighters, pump operators and engineers in meeting the requirements for Fire Apparatus Driver/Operator certification. Content covers characteristics of water, friction loss, engine pressure, multiple lines, unequal layouts, pump and pumpers and field equations.

**Hours:** 36 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

**FIRE B61 Fire Fighter Trainee Academy***3 units***Recommended:** Reading Level 4**Description:** Basic educational and practical training essential for firefighter trainees. Emphasizes organizational procedures, forcible-entry tools, protective breathing apparatus, emergency medical care, inspection procedures, fire protection equipment and systems; wildland fire control; fire behavior; and petroleum fire procedures.**Hours:** 54 lecture, 66 laboratory**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B62 Fire Fighter I Academy***12.5 units***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 laboratory**CCS:** Credit Course**Transferable:** Associate Degree only. Not transferable.**FIRE B63 Fire Fighter II Academy***6 units***Recommended:** FIRE B62 with a grade of 'C' or better, or equivalent.**Description:** Advanced academic and manipulative training essential for the achievement of job tasks specified for Fire Fighter II. Covers inspection and maintenance of equipment, fire protection surveys, fire prevention inspections, reports and plans and fire alarm features. Meets requirements for the California State Board of Fire Services, Fire Fighter II certification.**Hours:** 235 lecture/laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**FIRE B65 Fire Service Staff Development Training***3 units***Description:** Staff development training that provides students with contemporary firefighting techniques. Topics include the latest concepts involving: organizational development; fire services appliances; fire chemistry; automatic fire extinguisher and agents; fire prevention and enforcement; arson investigation; public safety; hazardous materials control and enforcement; mutual aid/joint powers agreement; communications; personal health issues; and emergency rescue techniques.**Hours:** 26 lecture, 52 laboratory**Repeat:** 3**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B66 Fire Fighting and Emergency Medical Skills***8 units***Prerequisites:** FIRE B62 or FIRE B63 with a grade of "C" or better.**Description:** Programs, workshops, seminars, and hose ladders, tools, salvage, chemistry, extinguisher and agents, fire control, prevention, arson, crowd and traffic control, manual aid, communications, fire and health safety, and emergency rescue techniques. Updates the skills of EMT 1-non-ambulance certificate holders as prescribed by law.**Hours:** 90 lecture, 162 laboratory**Repeat:** unlimited, legally mandated training**CCS:** Credit Course**Transferable:** Not degree applicable. Not transferable.**FIRE B67 Emergency Telecommunicator***3 units***Description:** Designed to provide students with a clearer understanding about being a professional Telecommunicator and help transfer that knowledge into positive actions that will assist callers and help bring each call to its best conclusion. Emphasizes decision-making, the act of dispatching, interacting with various types of public service agencies, personnel, and different organizational structures.**Hours:** 54 lecture**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**FIRE B68 Emergency Medical Dispatch***3 units***Description:** Designed to provide the dispatcher with information, training and experience in providing pre-arrival instructions over the telephone in medical emergency situations. Emphasizes decision-making in a non-visual environment, the act of working in concert with a reporting party to help mitigate a medical emergency until trained medical personnel arrive on scene. Instructs the student in the authority, personnel, organizational structure and their role in the emergency medical environment.**Hours:** 54 lecture**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**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**CCS:** Credit Course**Transferable:** Not degree applicable. Not transferable.**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**CCS:** Credit Course**Transferable:** Not degree applicable. Not transferable.**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:** 36 lecture

**CCS:** Occupational Education

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

### **FIRE B70D Hazardous Materials Tech/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

**CCS:** Credit Course

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

### **FIRE B70E Hazardous Materials Tech/Spec 1B: Applied Chemistry**

*1 unit*

**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:** 38 lecture, 2 laboratory

**CCS:** Credit Course

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

### **FIRE B70F Hazardous Materials Tech/Spec 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 laboratory

**CCS:** Credit Course

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

### **FIRE B70G Hazardous Materials Tech/Spec 1D: Tactical Field Operations**

*1 unit*

**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.

**Hours:** 40 lecture

**CCS:** Occupational Education

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

### **FIRE B70H Hazardous Materials Tech/Spec 1E: 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:** 40 lecture

**CCS:** Occupational Education

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

### **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:** 40 lecture

**CCS:** Occupational Education

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

### **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 laboratory

**CCS:** Credit Course

**Transferable:** Associate degree only. Not transferable.

### **FIRE B71B Seasonal Firefighter Basic Training 2**

*1 unit*

**Prerequisites:** 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 laboratory

**CCS:** Credit Course

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

### **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



**CCS:** Occupational Education

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

### **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 laboratory

**CCS:** Credit Course

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

### **FIRE B72B Heavy Duty Rescue 1-2-3**

*0.5 unit*

**Recommended:** FIRE B2, FIRE 72H with grades of 'C' or better, or equivalent.

**Description:** Technical knowledge and practical skills necessary to successfully perform heavy duty rescue emergencies. Emphasizes methods and procedures for utilizing heavy duty rescue equipment, maintaining and storing of heavy duty rescue equipment, and recognizing basic types of building construction and their collapse characteristics resulting from various causes. Accredited by the California Fire Service Training and Education System.

**Hours:** 36 lecture/laboratory

**CCS:** Occupational Education

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

### **FIRE B72C Heavy Duty Rescue 1-2-3**

*1 unit*

**Recommended:** FIRE B2, FIRE 72H with grades of 'C' or better, or equivalent.

**Description:** Technical knowledge and practical skills necessary to successfully perform heavy duty rescue emergencies. Emphasizes methods and procedures for utilizing heavy duty rescue equipment, maintaining and storing of heavy duty rescue equipment, and recognizing basic types of building construction and their collapse characteristics resulting from various causes. Accredited by the California Fire Service Training and Education System.

**Hours:** 54 lecture/laboratory

**CCS:** Occupational Education

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

### **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

**CCS:** Credit Course

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

### **FIRE B72E Advanced Swift Water Rescue**

*1 unit*

**Recommended:** FIRE B72d with a grade of 'C' or better.

**Description:** Refinement of skills in manipulating and controlling activities at heavy swift water rescue scenes. Includes advanced river

crossing techniques, cross river strokes management, swift water search techniques, and team organizational requirements.

**Hours:** 20 lecture/laboratory

**CCS:** Occupational Education

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

### **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, 9 laboratory

**CCS:** Occupational Education

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

### **FIRE B72G Aircraft Fire Protection and Rescue**

#### **Procedures**

*1 unit*

**Recommended:** FIRE B62 with a grade of 'C' or better.

**Description:** Information, methods and techniques necessary for providing crash fire rescue services at airports. Including utilizing conventional fire apparatus and specialized crash fire rescue apparatus, crash fire rescue, extinguishing agents, various types of aircraft and operations at crash scenes.

**Hours:** 18 lecture, 18 laboratory

**Repeat:** 3

**CCS:** Occupational Education

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

### **FIRE B72H Emergency Medical Technician**

*7.5 units*

**Recommended:** FIRE B1 with a grade of 'C' or better.

**Prerequisites:** Student must be 18 years of age by the completion date of the course.

**Description:** Designed to prepare students for the national registry exam and certification as California State Emergency Medical Technicians and gain employment as a Firefighter or ambulance attendant or law enforcement officer. After successful completion of this course, students will be authorized to take the National Registry EMT examination. Topics discussed include pre-hospital care terminology, cardiovascular emergencies, pre-hospital childbirth, communicable disease, extrication tools and equipment, automatic external defibrillator and an understanding of the emergency medical system. Course content is based on the guidelines and authority of Title 22, Division 9 of the California Code of Regulations, U.S. Department of Transportation Emergency Medical Technician-Based Standard National Curriculum, National Registry EMT Examinations, US Department of Transportation, and National EMS Education Standards (HS 811 077A). Students must be 18 years of age and have a current CPR card. Students are responsible for paying any certification fees. Student may repeat this class.

**Hours:** 126 lecture, 27 laboratory

**Repeat:** Legally Mandated Training

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **FIRE B72I Emergency Medical Technician I Refresher**

*1 unit*

**Prerequisites:** FIRE B72H 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.

**Hours:** 24 lecture

**Repeat:** legally mandated training

**CCS:** Credit Course

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

### **FIRE B74 Petroleum Fire Procedures**

*0.5 unit*

**Recommended:** FIRE B50A with a grade of 'C' or better, or equivalent.

**Description:** Practical experiences in various firefighting procedures involving flammable liquid fire emergencies, at/or near petroleum installations. Includes utilization of safety practices and extinguishment of various types of petroleum product fires. Certified by the California State Fire Service Training and Educational Program.

**Hours:** 3 lecture, 6 laboratory

**Repeat:** 1

**CCS:** Occupational Education

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

### **FIRE B75 Fire Fighting Techniques**

*0.5 unit*

**Recommended:** FIRE B62 with a grade of 'C' or better.

**Description:** Advanced techniques of fire control involving the utilization of personnel, equipment, and extinguishing agents in emergency situations.

**Hours:** 9 to 27 lecture

**CCS:** Occupational Education

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

### **FIRE B77 Advanced Structure Fire Training**

*0.5 unit*

**Recommended:** FIRE B62 with a grade of 'C' or better.

**Description:** Latest techniques in structure fire control. Specialized firefighting techniques used to control residential, commercial and high-rise building fires.

**Hours:** 9 to 36 lecture

**CCS:** Occupational Education

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

### **FIRE B78 Advanced Officer Training**

*0.5 unit*

**Recommended:** FIRE B62 with a grade of 'C' or better.

**Description:** Contemporary techniques of supervision, concentrating on supervision techniques identified by local fire service agencies.

**Hours:** 9 to 36 lecture

**Repeat:** 1

**CCS:** Occupational Education

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

### **FIRE B79 Instructor Orientation**

*0.5 unit*

**Recommended:** FIRE B51G, FIRE B51H with grades of 'C' or better.

**Description:** Assists fire technology instructors with information needed to properly administer classroom activities. State certification system, administrative procedures, curriculum development and organization, publication format and style, and teaching strategies for accredited regional courses are emphasized.

**Hours:** 9 to 24 lecture

**CCS:** Occupational Education

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

### **FIRE B81 Orientation to Fire Technology**

*0.5 unit*

**Recommended:** FIRE B51G, FIRE B51H with grades of 'C' or better.

**Description:** Assists fire technology instructors with information needed to properly administer classroom activities. Includes information on the certification system, administrative procedures, curriculum development and organization, publication format and style, and teaching strategies for accredited regional courses.

**Hours:** 9 to 24 lecture

**CCS:** Occupational Education

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

### **FIRE B83A Wildfire Origin and Cause Determination**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 27 lecture

**CCS:** Occupational Education

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

### **FIRE B83B Fire Operations in the Urban Interface**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command Systems. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 27 lecture

**CCS:** Occupational Education

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

### **FIRE B83C Interagency Helicopter Training Guide**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command Systems. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 40 lecture

**CCS:** Occupational Education

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

### **FIRE B83D Field Observer/Display Processor**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture

**CCS:** Occupational Education

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

### **FIRE B83F Firing Methods and Procedures**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command Systems. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 24 lecture

**CCS:** Occupational Education

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

### **FIRE B83G Base/Camp Manager**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture

**CCS:** Occupational Education

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

### **FIRE B83H Helibase Manager**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 24 lecture

**CCS:** Occupational Education

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

### **FIRE B83I Basic Air Operations**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 12 lecture

**CCS:** Occupational Education

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

### **FIRE B83J Intermediate Wildland Fire Behavior**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture

**CCS:** Occupational Education

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

### **FIRE B83K Incident Commander, Multiple Resources Extended Attack**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System.

**Hours:** 9 lecture

**CCS:** Occupational Education

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

### **FIRE B83L Fire Suppression Tactics**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture

**CCS:** Occupational Education

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

### **FIRE B83M Strike Team Leader/Crew**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 12 lecture

**CCS:** Occupational Education

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

### **FIRE B83N Strike Team Leader/Engine**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 12 lecture

**CCS:** Occupational Education

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

### **FIRE B83O Strike Team Leader/Dozer**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 12 lecture

**CCS:** Occupational Education

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

### **FIRE B83P Division/Group Supervisor**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 10 lecture

**CCS:** Occupational Education

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

### **FIRE B83Q Situation Unit Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 24 lecture

**CCS:** Occupational Education

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

### **FIRE B83R Demobilization Unit Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet

certification standards set forth by the National Interagency Incident Management System.

**Hours:** 16 lecture

**CCS:** Occupational Education

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

### **FIRE B83S Resources Unit Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 24 lecture

**CCS:** Occupational Education

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

### **FIRE B83T Facilities Unit Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture

**CCS:** Occupational Education

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

### **FIRE B83U Ground Support Unit Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 9 lecture

**CCS:** Occupational Education

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

### **FIRE B83V Supply Unit Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 24 lecture

**CCS:** Occupational Education

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

### **FIRE B83W Food Unit Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 24 lecture

**CCS:** Occupational Education

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

### **FIRE B83X Communications Unit Leader**

*1.5 units*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 36 lecture

**CCS:** Occupational Education

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

### **FIRE B83Y Time Unit Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 12 lecture

**CCS:** Occupational Education

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

### **FIRE B83Z Procurement Unit Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares municipal, county, state, and federal fire personnel to meet certification standards set forth by the National Interagency Incident Management System.

**Hours:** 12 lecture

**CCS:** Occupational Education

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

### **FIRE B84A Helicopter Coordinator**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 12 lecture

**CCS:** Occupational Education

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

### **FIRE B84B Air Support Supervisor**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture

**CCS:** Occupational Education

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

### **FIRE B84C Air Tanker Coordinator**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture

**CCS:** Occupational Education

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

**FIRE B84D Air Attack Supervisor***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84E Incident Commander***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 24 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84F Safety Officer***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84G Information Officer***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certifications standards set by the National Interagency Incident Management System.

**Hours:** 32 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84H Command and General Staff***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 40 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84I Operation Section Chief***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 40 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84J Planning Section Chief***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84K Logistics Section Chief***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84L Finance Section Chief***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident System.

**Hours:** 32 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84M Air Operations Branch Director***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 24 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84N Intermediate Air Operations***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 40 lecture**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**FIRE B84O Introduction to Wildland Fire Behavior Calculations***0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service

agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 18 lecture

**CCS:** Occupational Education

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

### **FIRE B84P Advanced Wildland Fire Behavior**

#### **Calculations**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 40 lecture

**CCS:** Occupational Education

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

### **FIRE B84Q Introduction to Wildland Fire Suppression for Rural Fire Departments**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 12 lecture

**CCS:** Occupational Education

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

### **FIRE B84R CWN (Call When Needed) Helicopter Module Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 40 lecture

**CCS:** Occupational Education

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

### **FIRE B84T Dozer Boss**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire services agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 32 lecture

**CCS:** Occupational Education

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

### **FIRE B84U Strike Team/Task Force Leader**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System.

**Hours:** 12 to 40

**CCS:** Occupational Education

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

### **FIRE B84V Crew Representative**

*0.5 unit*

**Description:** Professional development workshops and seminars related to specific topics of the Incident Command System. Prepares personnel from municipal, county, state, and federal fire service agencies in meeting certification standards set forth by the National Interagency Incident Management System.

**Hours:** 9 to 40

**CCS:** Occupational Education

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

### **FIRE B85 Special Topics**

*0.5 unit*

**Description:** Various mandated training topics required by California State Fire Marshal (CSFM).

**Hours:** 9 lecture hours for each .5 unit (9-54)

**Repeat:** Unlimited

**CCS:** Credit Course

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

## **Food Service Courses**

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### **FDSV B50 Introduction to the Foodservice Industry**

*2 units*

**Recommended:** Reading - one level prior to transfer.

**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. Fields trips required.

**Hours:** 36 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **FDSV B51 Food and Nutrition Orientation**

*0.5 unit*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **FDSV B52 Foodservice Sanitation and Safety**

*2 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

**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/safety principles. Cookery principles relating to stocks, sauces, soups, meats, vegetables, salads, potatoes, and starches.

**Note:** Field trips may be required.

**Hours:** 45 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

**FDSV B55B Food Service Production Theory II***2.5 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

**FDSV B55C Food Service Production Lab I***2 units*

**Prerequisites:** Completion of FDSV B55a or FDSV B55b with a grade of 'C' or better (may be taken concurrently).

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

**FDSV B55D Food Service Production Lab II***2 units*

**Prerequisites:** FDSV B55a or FDSV B55b with a grade of 'C' or better (may be taken concurrently).

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

**FDSV B55E Advanced Food Service Practicum***3 units*

**Prerequisites:** FDSV B52, B55a, B55b, B55c and B59 with minimum grades of C.

**Recommended:** NUTR B10. Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

**FDSV B55F Fundamentals of Baking***2 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Advanced baking experience in the production of cakes, basic creams, icings, dessert sauces, doughnuts, crepes, tarts, puff pastry, éclairs, meringues, petit fours and specialty cookies. Decorative work and display pieces, product presentation and marketing techniques demonstrated.

**Hours:** 108 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

**FDSV B55I Food and Nutrition Internship***1 unit*

**Prerequisites:** FDSV B52, B55a, B55b, B55c, B55d, and B59 with minimum grades of 'C' or better.

**Recommended:** NUTR B10. Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

**FDSV B59 Food Service Production Management***3 units*

**Prerequisites:** FDSV B50, FDSV B52, and FDSV B55a, or FDSV B55b all with grades of 'C' or better, or may be taken concurrently.

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

**FDSV B64A Dietetic Service Supervisor Practicum***2 units*

**Recommended:** Reading - one level prior to transfer.

**Prerequisites:** NUTR B10 and NUTR B50 with grades of 'C' or better.

**Description:** Role and responsibilities of the Dietetic Service Supervisor in health care and community foodservice operations. Application of standards, principles and techniques of basic nutrition, modified diets, nutrition education, data gathering and patient/staff communications. Course provides 120 hours directed unpaid clinical work experience in an approved health care facility. (50 hours may be in a facility in which the student is employed). Field trips may be required.

**Hours:** 120 directed field work experience

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **FDSV B71 ServSafe Certification**

*0.5 unit*

**Recommended:** Reading - one level prior to transfer.

**Description:** Basic principles and procedures of food safety training including prevention of food-related illnesses and the development and implementation of food safety systems in food facilities.

Course is designed for managers and employees to meet/renew the minimum food safety certification requirements of California legislation effective January 1, 2000. Certificate of Sanitation is awarded from the Educational Foundation of the National Restaurant Association upon passing the required exam. Repeats: Unlimited.

**Hours:** 9 lecture

**Repeat:** unlimited

**CCS:** Occupational Education

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

## **Forestry Courses**

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### **FORE B1 Introduction to Forestry**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** UC, CSU and private colleges

### **FORE B2 Natural Resources**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Occupational Education

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

### **FORE B3 Wildlife Management**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **FORE B4 Wildlife Law Enforcement**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **FORE B6 Forestry Skills**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

## **Geography Courses**

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### **GEOG B1 Physical Elements of Geography**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** A study of the basic elements of physical geography and the world as a system. Important elements include the atmosphere, weather and climate, geomorphology, and Earth's structure. The main goal of the course is to provide students with a greater understanding and appreciation for their physical environment, with special attention given to terrestrial relationships.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

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

### **GEOG B1L Physical Geography Laboratory**

*1 unit*

**Prerequisites:** GEOG B1 (with a grade of 'C' or better), may be taken concurrently.

**Recommended:** Reading - one level prior to transfer.

**Description:** Laboratory 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, and topographic map interpretation.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

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

## GEOG B2 Human Geography

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Human Geography is designed to demonstrate how people interact culturally with their environment. Special emphasis will be placed on concepts such as population, movement, cultures, and civilizations. Economic factors affecting people's lives and religion will also be emphasized.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.5; BC GE D.2

## GEOG B3 Introduction to Weather and Climate

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Introduction to weather and climate focuses on changes in weather and climate patterns throughout the world. Special emphasis will be given to atmospheric phenomena such as El Nino, hurricanes, tornadoes, and weather mapping. In addition, atmospheric forces such as the pressure gradient and coriolis force will be discussed in detail.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

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

## GEOG B5 World Regional Geography

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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.

**Hours:** 54 lecture

**CCS:** Credit course

**Transferable:** CSU and private colleges

## Geology Courses

### GEOL B10 Introduction to Geology

*3 units*

**Prerequisites:** Reading - one level prior to transfer.

**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 laboratory experience should enroll in GEOL B10L concurrently with GEOL B10.

**Note:** At least one Saturday field trip or equivalent required. Not open to students who have taken GEOL B1A.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**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 Laboratory

*1 unit*

**Prerequisites:** GEOL B10 (may be taken concurrently).

**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 laboratory

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer. At least one Saturday field trip or equivalent required.

**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 laboratory experience should enroll in GEOL B11L concurrently with GEOL B11.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**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 Laboratory

*1 unit*

**Prerequisites:** GEOL B11 may be taken before the lab or it may be taken concurrently.

**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.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

**C-ID:** GEOL 110L

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

### GEOL B12 Geology of California

*3 units*

**Prerequisites:** GEOL B1a, or GEOL B10, ERSC B10, with grades of 'C' or better. Reading - one level prior to transfer.

**Description:** An elementary course dealing with the geologic history, structure, topography and mineral resources of California and adjoining areas. One Saturday field trip or equivalent may also be required.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**C-ID:** GEOL 200

**Transferable:** UC, CSU and private colleges

### GEOL B21 Topics in Geology

*1-3 units*

**Recommended:** Reading - one level prior to transfer.

**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.

**Note:** Field trips required.

**Hours:** 18 lecture hours for each unit (18-54)

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **GEOL B35A Rocks and Minerals**

*1 unit*

**Recommended:** Reading - one level prior to transfer. Field trip required.

**Description:** A study of rocks and minerals. Students will learn to identify the major rock-forming minerals and to recognize their relationships as components of the various classes of rocks. From the identification of rocks, recognition of the environmental conditions of deposition will follow. Field work will allow the examination of the field relationships of various rocks and the beginning of a collection of rock and mineral specimens.

**Hours:** 18 lecture

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **GEOL B35B Geology of Kern County**

*1 unit*

**Recommended:** Reading - one level prior to transfer. Field trip required.

**Description:** A study of the geologic history and landforms of Kern County, and the geologic forces and processes that created them. As part of this course, students will learn about many of the different rocks and minerals of Kern County, tectonic activity and mountain building, volcanic activity, earthquakes and weathering. From materials presented, students will be able to understand the geologic forces that shaped Kern County. A field trip is required that will permit the examination and recognition of different geological environments.

**Hours:** 18 lecture

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

## **Health Education Courses**

### **HLED B1 Principles of Health Education**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Health and health-related services. Includes emotional health, nutrition, drugs, marriage and family, physical disease, exercise and environmentally related health concerns.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

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

## **History Courses**

### **HIST B1 World History from the Origins of Civilization to 1600**

*3 units*

**Recommended:** Reading and Writing - one level prior to transfer.

**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.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE C.2; CSU GE D.6; BC GE D.2

### **HIST B2 History of the World (Since 1650)**

*3 units*

**Recommended:** Reading and Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.6; BC GE D.2

### **HIST B4A European Civilization**

*3 units*

**Recommended:** Reading and Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.6; BC GE D.2

### **HIST B4B European Civilization**

*3 units*

**Recommended:** Reading and Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.6; BC GE D.2

### **HIST B15 Civilizations of the Middle East**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE C.2; CSU GE D.6; BC GE D.2

**HIST B17A History of the United States***3 units*

**Recommended:** English 50 or reading - one level prior to transfer and writing - one level prior to transfer.

**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. HIST B17A is not a prerequisite to HIST B17B.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.6; BC GE D.2; BC GE D.3

**HIST B17B History of the United States Since 1870***3 units*

**Recommended:** English 50 or reading - one level prior to transfer and writing - one level prior to transfer.

**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. HIST B17A is not a prerequisite to HIST B17B.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**C-ID:** HIST 140

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.6; BC GE D.2; BC GE D.3

**HIST B18 History of California***3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges; IGETC 3.B; IGETC 4; 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:** ENGL B50. Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.3; CSU GE D.6; BC GE D.2; BC GE D.3

**HIST B20B African American History of the United States***3 units*

**Recommended:** Reading and writing 1 level below transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.3; CSU GE D.6; BC GE D.2

**HIST B25 Introduction to Women in American History***3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Survey of the history of women in America from the pre-colonial period to 1900 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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.4; CSU GE D.6; BC GE D.2

**HIST B30A Early Chicano History***3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.3; CSU GE D.6; BC GE D.2

**HIST B30B History of Chicanos in the Southwest***3 units*

**Recommended:** Reading - one level prior to transfer and Writing - 2 levels prior to transfer.

**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

**CCS:** Credit Course

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.3; CSU GE D.6; BC GE D.3

**HIST B33 Latin American History***3 units*

**Recommended:** Reading - one level prior to transfer.

**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 taken the equivalent course, CHST B33.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; CSU GE D.3; CSU GE D.6; BC GE D.2

### **HIST B36 History of Native American Indians**

*3 units*

**Recommended:** ENGL/ENSL B50 or reading - one level prior to transfer.

**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.

**Note:** Offered only occasionally.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 3.B; IGETC 4; CSU GE D.3; CSU GE D.6; BC GE D.2; BC GE D.3

## **Human Services Courses**

### **HMSV B5 Human Services Internship**

*2 units*

**Prerequisites:** HMSV B40 with a grade of 'C' or better. Student must attend a mandatory orientation and obtain the signature of the Human Services Program Coordinator before enrolling in HMSV B5.

**Recommended:** Writing and Reading - one level prior to transfer.

**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 Human Services Program Coordinator is required to register for this class. Eligible interns may take two units per semester until a total of 4 units (216 hours of field work) has been completed.

**Repeat:** 1

**Hours:** 18 lecture, 108 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **HMSV B40 Introduction to Human Services**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

## **Industrial Drawing Courses**

### **INDR B10 Introduction to Industrial Drawing and Graphics**

*1 unit*

**Description:** Introductory course dealing with conventional drafting methods to obtain graphic solutions, design modifications, and create delineations for industrial, architectural and engineering drawings. Emphasizes basic drafting skills.

**Hours:** 9 lecture, 27 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **INDR B11 Introduction to Computer Aided Drafting and Drawing (CAD)**

*1 unit*

**Description:** Introductory course utilizing a computer aided drafting and design (CAD) program to obtain graphic solutions, design modifications, and delineations for industrial, architectural, and engineering drawings. Emphasizes building skills necessary to function as a CAD operator in industry. (Transferable to CSU as an elective.)

**Hours:** 9 lecture, 27 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **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.

**Hours:** 18 lecture, 54 laboratory

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **INDR B20a Computer Aided Drafting and Design (CAD)**

*3 units*

**Prerequisites:** INDR B10 and INDR B11 with grades 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:** \$3.00

**Hours:** 27 lecture, 81 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **INDR B20b Computer Aided Drafting and Design (CAD)**

*3 units*

**Prerequisites:** 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 laboratory

**CCS:** Occupational Education

**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 laboratory**CCS:** Occupational Education**Transferable:** CSU and private colleges, Associate 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 laboratory**CCS:** Occupational Education**Transferable:** CSU and private colleges. Associate Degree applicable.**INDR B50 Process Piping***3 units***Prerequisites:** INDR B10 and INDR B11.

**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:** \$3.00**Hours:** 27 lecture, 81 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**INDR B51 Electrical Design***3 units***Prerequisites:** INDR B10 and INDR B11 with minimum grade of C.

**Description:** Introduces the student to the drawing and drafting techniques used in the preparation of electrical construction drawing in industry today. Emphasizes concepts of design to the student utilizing various national, state, and local rules and codes (e.g. 1987 National Electrical Code).

**Materials Fee:** \$3.00**Hours:** 27 lecture, 81 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**INDR B52 Civil Drafting and Geographic Information Systems***3 units***Prerequisites:** INDR B20a 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 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**Industrial Technology Courses****INDT B5 Architectural Woodworking and Design***1 unit***Prerequisites:** ARCH B6 (may be concurrently enrolled).

**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 laboratory**CCS:** Occupational Education**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**CCS:** Occupational Education**Transferable:** CSU and private colleges**INDT B271 Special Problems in Welding***2 units***Prerequisites:** WELD B1a and WELD B1B and WELD B53a and WELD B74A and WELD B74B with grades 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 laboratory**CCS:** Credit Course**Transferable:** Associate Degree only. Not transferable.**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)**CCS:** Credit Course**Transferable:** Not degree applicable. Not transferable.**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 laboratory hours for each unit (36-54)

**CCS:** Credit Course

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

### **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 laboratory hours for each unit (108 – 162)

**CCS:** Credit Course

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

### **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 laboratory

**CCS:** Credit Course

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

## **Japanese Courses**

### **JAPN B1 Elementary Japanese**

*5 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Introduction to Japanese language and culture. Special emphasis on speaking and understanding Japanese along with mastering elementary grammar and compositions while learning the characters of Japanese alphabets. Requires practice with audiotape/CD program outside of class.

**Hours:** 90 lecture

**CCS:** Liberal Arts/Science

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

### **JAPN B2 Elementary Japanese**

*5 units*

**Prerequisites:** 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:** 90 lecture

**CCS:** Liberal Arts/Science

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

### **JAPN B3 Elementary Japanese**

*5 units*

**Prerequisites:** 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. 100 new kanji (Chinese characters) are introduced in this course.

**Hours:** 90 lecture

**CCS:** Liberal Arts/Science

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

## **Journalism Courses**

### **JRNL B1 Media and Society**

*3 units*

**Recommended:** Writing - one level prior to transfer. Reading - one level prior to transfer. Field trips required.

**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.

**Hours:** 54 lecture

**CCS:** Occupational Education

**C-ID:** JOUR 100

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.8; BC GE D.2

### **JRNL B2 Beginning Reporting**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Occupational Education

**C-ID:** JOUR 110

**Transferable:** CSU and private colleges

### **JRNL B4 Introduction to Public Relations**

*3 units*

**Recommended:** JRNL B2 with a grade of 'C' or better. Writing - one level prior to transfer. Reading - one level prior to transfer.

**Description:** An introduction to public relations in today's society, including history of public relations and study of definitions, processes and audiences of businesses as well as nonprofit organizations. Includes how to prepare, write and submit news releases to electronic and print media. Field trips required.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **JRNL B15 Press Photography**

*3 units*

**Recommended:** Writing - one level prior to transfer. Reading - one level prior to transfer.

**Important:** Digital camera required.

**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.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**C-ID:** JOUR 160

**Transferable:** CSU and private colleges

### JRNL B16 Multimedia Reporting

*3 units*

**Recommended:** JRNL B15

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### JRNL B26 Newspaper Production/Editors

*4 units*

**Recommended:** JRNL B27A

**Description:** Designed for editors and second-semester students 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.

**Hours:** 18 lecture, 162 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### JRNL B27A Newspaper Production/Reporters

*3 units*

**Recommended:** JRNL B2 with a grade of 'C' or better. Writing - one level prior to transfer. Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**C-ID:** JOUR 130

**Transferable:** CSU and private colleges

### JRNL B27E Newspaper Production/Photographers

*3 units*

**Recommended:** JRNL B15. Writing - one level prior to transfer. Reading - one level prior to transfer.

**Description:** Production practicum for the print and online editions of *The Renegade Rip*, Bakersfield College's award-winning student-produced college newspaper. This course offers experience in how to take color news, feature, and sports photographs, black and white photo technology, photo editing and sizing photo essay design, photo polls, environmental portraits and photo illustrations. Students wishing to take photos for the college newspaper using digital should be enrolled.

**Hours:** 18 lecture, 108 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

## Library Courses

### LIBR B1 Introduction to Library Research

*1 unit*

**Recommended:** Writing - one level prior to transfer. Reading - one level prior to transfer.

**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

**CCS:** Credit course

**Transferable:** UC, CSU and private colleges

### LIBR B55 Information Competency

*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

**CCS:** non-enhanced funding

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

## Manufacturing/Machine Technology Courses

### MFGT B1AB Machine Tool Processes

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Machine tool technology including the use of precision measuring instruments, drilling machines, saws, lathes, and vertical milling machines.

**Note:** Elective credit only.

**Hours:** 27 lecture, 81 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### MFGT B2 CNC Lathe Programming and Operation

*3 units*

**Recommended:** MFGT B1ab with a grade of 'C' or better, or evaluation by instructor of students machining skills. Reading - one level prior to transfer.

**Description:** Set-up, operation and programming of a computer numerical control lathe.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### MFGT B3 CNC Mill Programming

*3 units*

**Recommended:** MFGT B1ab with a grade of 'C' or better. Reading -

one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **MFGT B53 Machine Tool Set-Up**

*3 units*

**Recommended:** MFGT B1AB with a grade of 'C' or better.

**Description:** Machine shop practices with an emphasis on safety, bench work techniques, applied mathematics, setup techniques, used mills, lathes, and drill presses. Also, introduces precision grinding, metallurgy, and heat treatment.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## **Mathematics Courses**

### **MATH BA Elementary Algebra**

*5 units*

**Recommended:** Reading - 1 level prior to transfer.

**Prerequisite:** MATH B50 with a grade of C or better or equivalent pre-algebra course with a grade of "C" or better or qualifying score on placement assessment.

**Description:** Fundamental concepts and mathematical processes, first degree equations, special products and factoring, fractions and fractional equations, ratios, proportions, radicals, exponents, graphs, simultaneous linear equations, quadratic equations.

**Hours:** 90 lecture

**CCS:** Credit Course

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

### **MATH BD Intermediate Algebra**

*5 units*

**Recommended:** Reading - 1 level prior to transfer.

**Prerequisite:** MATH BA with a grade of C or better or one year of high school algebra or equivalent with a grade of "C."

**Description:** Sets and operations, signed numbers, factoring, linear equations, simple and complex fractions, functional notation, simple graphs, exponents and radicals, quadratic equations, the conics, variation, determinants, logarithms, exponential equations, sequences and series and the binomial expansion.

**Hours:** 90 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable; BC GE B.2

### **MATH B1A Precalculus I**

*4 units*

**Prerequisites:** MATH BD/MATH B70 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

**CCS:** Credit Course

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

### **MATH B1B Precalculus II**

*4 units*

**Prerequisites:** MATH B1a 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

**CCS:** Credit Course

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

### **MATH B2 Basic Functions and Calculus for Business**

*4 units*

**Prerequisites:** MATH B1A 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.

**Hours:** 72 lecture

**CCS:** Liberal Arts/Science

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

### **MATH B4A Mathematics for Elementary School Teaching**

*4 units*

**Prerequisites:** MATH BD or MATH B70 with a grade of 'C' or better or Placement By Testing

**Description:** Designed for prospective elementary school teachers. Development of real numbers including integers, rational and irrational numbers, computation, prime numbers and factorizations, and problem-solving strategies.

**Hours:** 72 lecture

**CCS:** Liberal Arts/Science

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

### **MATH B6A Analytic Geometry and Calculus I**

*4 units*

**Prerequisites:** MATH B1B or equivalent with a grade of 'C' or better.

**Description:** Transcendental functions, polar coordinates, sequences, infinite series and methods of integration. Further exposure to techniques and applications of differential and integral calculus.

**Hours:** 72 lecture

**CCS:** Liberal Arts/Science

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

### **MATH B6B Analytic Geometry and Calculus II**

*4 units*

**Prerequisites:** MATH B6A with a grade of 'C' or better.

**Description:** Transcendental functions, polar coordinates, sequences, infinite series and methods of integration. Further exposure to techniques and applications of differential and integral calculus.

**Hours:** 72 lecture

**CCS:** Liberal Arts/Science

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



**MATH B6C Calculus III***4 units***Prerequisites:** 3, 4, or 5 on the AP-BC Test or MATH B6b or equivalent with a grade of 'C'.**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.**Hours:** 72 lecture**CCS:** Liberal Arts/Science**C-ID:** MATH 230**Transferable:** UC, CSU and private colleges; IGETC 2; CSU GE B.4; BC GE B.2**MATH B6D Ordinary Differential Equations***3 units***Prerequisites:** MATH B6c with a grade of 'C' or better.**Description:** Vector spaces and linear transformations; elementary differential equations; Laplace transforms; series solutions and systems of differential equations; matrices and Eigen values.**Hours:** 54 lecture**CCS:** Liberal Arts/Science**Transferable:** UC, CSU and private colleges; IGETC 2; CSU GE B.4**MATH B6E Elementary Linear Algebra***3 units***Prerequisites:** MATH B6C or equivalent with a grade of 'C'.**Description:** Real and complex number fields, vector spaces, linear transformation, matrices, systems of equations and matrix inversion, determinants, eigenvalues and Eigen vectors.**Hours:** 54 lecture**CCS:** Liberal Arts/Science**C-ID:** MATH 250**Transferable:** UC, CSU and private colleges; IGETC 2; CSU GE B.4**MATH B21 Special Projects***1-2 units***Description:** Individually directed work in mathematics, including advanced topics, research projects, special problems and applications of mathematics to specific subject areas. Interested students should talk with their math instructors for an evaluation of their math skills. Field trips may be required.**Hours:** 18 laboratory hours for each unit (18-36)**CCS:** Liberal Arts/Science**Transferable:** UC, CSU and private colleges**MATH B22 Elementary Probability and Statistics***4 units***Prerequisites:** Appropriate Placement Score or MATH B70 or MATH BD 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**CCS:** Credit Course**Transferable:** UC, CSU and private colleges; IGETC 2; CSU GE B.4; BC GE B.2**MATH B23 Finite Mathematics***3 units***Prerequisites:** Math BD/MATH 70 with a grade of 'C' or better or Appropriate Math Placement.**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.**Hours:** 54 lecture**CCS:** Liberal Arts/Science**Transferable:** UC, CSU and private colleges; IGETC 2; CSU GE B.4; BC GE B.2**MATH B50 Modern College Arithmetic and Pre-Algebra***4 units***Prerequisites:** ACDV B77 or equivalent arithmetic course with a grade of 'C' or better or qualifying score on placement assessment.**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 percent, ratios, proportions, exponents, averages, estimation, graphs and measurement. The introduction to algebra includes operations with signed numbers and solving simple equations. Not open to students with credit in MATH B251 and MATH B252.**Hours:** 72 lecture**CCS:** Pre-collegiate basic skills**Transferable:** Not degree applicable. Not transferable.**MATH B60 Beginning Algebra***5 units***Prerequisites:** MATH B50 or Equivalent pre-algebra course with a grade of 'C' or better or Mathematics 2 levels prior to transfer. Fundamental concepts and mathematical processes first degree equations, polynomials, special products and factoring, rational expressions and equations, ratios, proportions, exponents, graphs, simultaneous linear equations.**Description:** Fundamental concepts and mathematical processes first degree equating polynomials, special products and factoring, rational expressions and equations, ratios, proportions, exponents, graphs, simultaneous linear equations.**Hours:** 90 lecture**CCS:** Pre-collegiate basic skills**Transferable:** Not degree applicable. Not transferable.**MATH B70 Intermediate Algebra***5 units***Prerequisites:** MATH B60/MATH BA or equivalent intro-algebra with a grade of 'C' or better. Mathematics - one level prior to transfer. 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.**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:** Associate Degree only. Not transferable. BC GE B.2**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 laboratory class is required.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Credit course

**Transferable:** CSU and private colleges

### **MCAE 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. Laboratory required.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Credit course

**Transferable:** UC, CSU and private colleges

## **Medical Science Courses**

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### **MEDS B35 Lifespan Development**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges; CSU GE E; BC GE E

### **MEDS B52 Basic Life Support 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 will enable students to recognize emergencies and how to respond to them. At the end of the course, the successful student will qualify for an American Heart Association Healthcare Provider BLS card.

**Materials Fee:** \$12.00

**Repeat:** legally mandated training

**Hours:** 9 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **MEDS B66 Intravenous Therapy and Blood Withdrawal**

*2 units*

**Prerequisites:** Healthcare provider.

**Description:** Principles of intravenous therapy and blood withdrawal. Designed to enable the Licensed Vocational Nurse to safely initiate and maintain intravenous therapy in a clinical setting. LVNs successfully completing the course will be certified by the California Board of Vocational Nurse Examiners to initiate and superimpose intravenous fluids.

**Hours:** 27 lecture, 9 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **MEDS B68 Home Health Aide**

*1.5 units*

**Prerequisites:** MEDS B69

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **MEDS B69 Nurse Assistant**

*6 units*

**Prerequisites:** Program requirements. See Allied Health Department for specifics.

**Recommended:** MEDS B60 with a grade of 'C' or better.

**Description:** Course focus is to prepare the nurse assistant for certification by the State of California as an entry-level worker on a health care team. The curriculum is structured to provide theory and practical application on skills needed to function as a nurse assistant. Correlated laboratory experiences are provided with emphasis on providing basic nurse assistant care to residents in a long term care setting. Concepts presented in MEDS B69 are applied in the laboratory and clinical setting. Formerly MEDS B67 and MEDS B67L.

**Materials Fee:** \$72.00

**Hours:** 63 lecture, 135 laboratory

**CCS:** Occupational Education

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

## **Music Courses**

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### **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

**CCS:** Liberal Arts/Science

**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:** MUSC B2 with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer. Concurrent enrollment in MUSC B15a.

**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

**CCS:** Liberal Arts/Science

**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:** MUSC B4a with a grade of 'C' or better.

**Recommended:** Reading - one level prior to transfer. Concurrent enrollment in MUSC B15 and MUSC B230b.

**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

**CCS:** Liberal Arts/Science

**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:** MUSC B4b with a grade of 'C' or better.

**Corequisite:** MUSC B15c must be taken concurrently.

**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

**CCS:** Liberal Arts/Science

**C-ID:** MUS 150

**Transferable:** UC, CSU and private colleges

### MUSC B5A Class Piano

*1 unit*

**Recommended:** Reading - one level prior to transfer. English Level 6.

**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 laboratory

**CCS:** Liberal Arts/Science

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

### MUSC B5B Class Piano

*1 unit*

**Prerequisites:** Demonstrated by audition of piano skill of at least MUSC B5a level.

**Recommended:** MUSC B5A with a grade of 'C' or better or equivalent. Reading - one level prior to transfer.

**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 laboratory

**CCS:** Liberal Arts/Science

**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 laboratory

**CCS:** Liberal Arts/Science

**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 laboratory

**CCS:** Liberal Arts/Science

**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 laboratory

**CCS:** Liberal Arts/Science

**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 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### MUSC B7 Applied Music

*1 unit*

**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.

**Prerequisite:** Enrollment open only to students who pass a qualifying audition.

**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 laboratory

**Repeat:** 3

**CCS:** Credit course

**Transferable:** UC, CSU and private colleges

### **MUSC B9A Beginning Class Guitar**

*1 unit*

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Liberal Arts/Science

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

### **MUSC B9B Intermediate Class Guitar**

*1 unit*

**Prerequisites:** MUSC B9a with a grade of 'C' or better or guitar playing ability of at least MUSC B9a level as determined by instructor.

**Recommended:** Reading - one level prior to transfer. A suitable acoustic guitar is required.

**Description:** Intermediate techniques of guitar playing. Emphasizes advanced chord positions, scales, arpeggios, slurs, and bar chords.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

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

### **MUSC B10A Concert Band**

*1 unit*

**Prerequisites:** Audition.

**Description:** Rehearsal and performance of standard band literature. Participation in public performances such as concerts, assemblies, and additional rehearsals are required.

**Hours:** 54 laboratory

**Repeat:** 3

**CCS:** Liberal Arts/Science

**C-ID:** MUS 180

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

### **MUSC B12A College Orchestra**

*1 unit*

**Prerequisites:** Limitation on enrollment, audition required.

**Description:** Performance of standard works from the orchestra literature. An audition and field trips are required for this course.

**Hours:** 54 laboratory

**Repeat:** 3

**CCS:** Liberal Arts/Science

**C-ID:** MUS 180

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

### **MUSC B13A Jazz Ensemble**

*1 unit*

**Recommended:** Reading - one level prior to transfer.

**Prerequisites:** Audition.

**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 laboratory

**Repeat:** 3

**CCS:** Credit Course

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

### **MUSC B14A College Choir**

*1.5 units*

**Prerequisites:** Limitation on enrollment, 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 laboratory

**Repeat:** 3

**CCS:** Liberal Arts/Science

**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 B230A and MUSC B4a.

**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 laboratory

**CCS:** Liberal Arts/Science

**C-ID:** MUS 135

**Transferable:** UC, CSU and private colleges

### **MUSC B15B Ear Training and Sight Singing**

*1 unit*

**Prerequisites:** MUSC B15A 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 laboratory

**CCS:** Credit Course

**C-ID:** MUS 145

**Transferable:** UC, CSU and private colleges

### **MUSC B15C Intermediate Ear Training and Sight Singing**

*1 unit*

**Corequisite:** MUSC B4c and MUSC B230c.

**Description:** Aural skill training in chromatic, post-tonal, and jazz oriented materials including exercises in singing, keyboard, dictation (melodic, rhythmic, and harmonic), and scale/mode/chord aural recognition.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **MUSC B17A Chamber Singers**

*1.5 units*

**Prerequisites:** Limitation on enrollment: Audition. Field trips for performances are required

**Description:** A select choral group, specializing in rehearsal and performance of all choral literature for all historical periods. Public performance required for credit.

**Hours:** 81 laboratory

**Repeat:** 3

**CCS:** Liberal Arts/Science

**C-ID:** MUS 180

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

### **MUSC B18A Drum Line**

*1 unit*

**Prerequisites:** Previous experience in a drum line or similar ensemble and evaluation of proficiency by instructor.

**Description:** Rehearsal and performance of drum line literature suitable for field, parade, and competition. Field trips and performances required.

**Note:** MUSC B18a, B18b, B18c and B18d, or any combination of these courses has a limit of 3 repeats.

**Hours:** 54 laboratory

**Repeat:** 3

**CCS:** Liberal Arts/Science

**Transferable:** Associate Degree only. Not transferable.

### **MUSC B21A History of Music**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

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

### **MUSC B22 Music Appreciation**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer.

**Description:** History and appreciation of jazz. Lectures, private listening, and concert attendance are required.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**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:** Reading and Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer.

**Description:** Introduction to the historical and stylistic developments of rock music, with emphasis on its social, economic and political consequences.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

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

### **MUSC B54A College Chorale**

*1 unit*

**Prerequisites:** Previous experience in a choral group and demonstrated proficiency.

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **MUSC B54B College Chorale**

*1 unit*

**Prerequisites:** Previous experience in a choral group and demonstrated proficiency. Field trips for performances are required.

**Recommended:** Reading - one level prior to transfer.

**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.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

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

### **MUSC B54C College Chorale**

*1 unit*

**Prerequisites:** Previous experience in a choral group and demonstrated proficiency. Field trips for performances are required.

**Recommended:** Reading - one level prior to transfer.

**Description:** Select choral ensemble of mixed voices specializing in the rehearsal and performances of major choral works. Repertoire is selected from choral literature of all periods.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

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

### **MUSC B54D College Chorale**

*1 unit*

**Prerequisites:** Previous experience in a choral group and demonstrated proficiency. Field trips for performances are required.

**Recommended:** Reading - one level prior to transfer.

**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.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

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

### **MUSC B230A Music Laboratory**

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 laboratory

**CCS:** Liberal Arts/Science

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

### **MUSC B230B Music Laboratory**

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).

**Hours:** 27 laboratory

**CCS:** Liberal Arts/Science

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

### **MUSC B230C Music Laboratory**

0.5 unit

**Description:** A computer-based, positive attendance course featuring self-pacing programmed system instruction in one or 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).

**Hours:** 27 laboratory

**CCS:** Liberal Arts/Science

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

## **Natural Resources**

### **Management Courses**

#### **NRES B1 Range Management**

3 units

**Recommended:** Reading - one level prior to transfer. Writing - 1 Level Prior to Transfer. Mathematics - 1 Level Prior to Transfer.

**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 laboratory

**CCS:** Credit Course

**Transferable:** CSU and private colleges

#### **NRES B2 Parks and Outdoor Recreation**

3 units

**Recommended:** Reading - one level prior to transfer.

**Description:** Introduction to national, state, county, city, and private park systems. History, philosophy, policy and principles of the formation, administration and functioning of recreational units at the park, district and regional levels.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

## **Nutrition Courses**

### **NUTR B10 Elementary Nutrition**

3 units

**Recommended:** Reading and writing - one level prior to transfer.

**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

**CCS:** Credit Course

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

### **NUTR B50 Modified Diets**

2 units

**Prerequisites:** NUTR B10 with a grade of C.

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## **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. Laboratory required. Field trips required.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ORNH B2 Fundamentals of Nursery Management and Plant Production**

3 units

**Recommended:** Reading - one level prior to transfer and Writing - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ORNH B3 Landscape Installation and Maintenance**

3 units

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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. Laboratory required.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ORNH B4 Plant Propagation**

*3 units*

**Recommended:** Reading and writing - one level prior to transfer.

**Description:** Principles of sexual propagation, seedage, and asexual propagation, budding, grafting, cuttings, layering, division and separation. Principles of tissue culture.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **ORNH B5 Nursery Management**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Commercial nursery operations. Propagation, propagation media, nursery design, propagation structures, plant structure, rooting aids, transplanting, stepping up and potting greenhouse and nursery plants.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ORNH B6 Ornamental Plant Identification-Ground Covers, Vines, and Dwarf Shrubs**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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. Laboratory required. Field trips required.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**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 laboratory

**CCS:** Occupational Education

**Transferable:** UC, CSU and private colleges

### **ORNH B8 Introduction to Landscape Design**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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. Laboratory required.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **ORNH B36 Beginning Floral Design**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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. Field trips may be required. Elective credit only.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

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

## **Philosophy Courses**

### **PHIL B6A Introduction to Philosophy**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Traditional basics of correct reasoning with an emphasis on their relationships to language, thought and argument.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**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**

*4 units*

**Prerequisites:** ENGL B1A with a grade of 'C' or better. Writing - one level prior to transfer.

**Description:** Development of critical thinking skills necessary for evaluating and formulating argumentative/ persuasive essays, and practice in applying those skills.

**Hours:** 72 lecture

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges; IGETC 3.B; CSU GE C.2; BC GE C.2

### **PHIL B32 World Religions: East**

3 units

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Survey of two main Eastern religions-Hinduism and Buddhism, and study of other important Asian religions such as Jainism, Sikhism, Lamaism, Confucianism, Taoism, and Shinto. Topics include each religions history, sacred scriptures, geographic dispersion, primary theological concepts and spiritual practices, and its role in contemporary society. Emphasis will be placed on understanding the distinct belief and practice of an individual in each of these religious traditions.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

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

### **PHIL B33 World Religions: West**

3 units

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Survey of three western religions - Judaism, Christianity, and Islam - and background religions to these including Egyptian, Persian, and European. Topics include each religions history, sacred scriptures, geographic dispersion, primary theological concepts and spiritual practices, and its role in contemporary society. Emphasis will be placed on understanding the distinct belief and practice of an individual in each of these religious traditions. Field trips required.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**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:** Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

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

## **Physical Education Courses**

### **PHED B2SB Aquatics: Beginning Swimming**

1 unit

**Description:** Course in beginning swimming in which the focus is on the knowledge and skill necessary to handle the body with ease in the water. Course covers basic mechanical, physiological and psychological concepts, fundamental safety skills and basic swimming strokes for the four competitive swimming strokes (Free, Back, Breast, and Fly).

**Note:** UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

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

### **PHED B3ADP Adaptive Physical Education**

1 unit

**Description:** Individualized fitness class for the physically challenged with activities designed to emphasize resistive circuit training combined, when possible, with aerobic training.

**Note:** UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.

**Hours:** 54 supervised tutoring

**Repeat:** Repetitions of adaptive physical education are allowed (beyond three) provided the student participates in at least one additional credit course that is not a physical education class and makes progress towards the stated educational goal as documented in the students educational plan and justification is documented by a DSPS counselor in the student's educational plan for the current term. Intended for students with physical challenges.

**CCS:** Liberal Arts/Science

**Transferable:** 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 laboratory

**CCS:** Liberal Arts/Science

**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 laboratory

**CCS:** Liberal Arts/Science

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

**PHED B6BLB Coeducational and Individual Activity:****Beginning Ballet***1 unit*

**Description:** Co-educational beginning ballet course. Includes warm-up exercises, technical skills and terminology.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

**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/toned, 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 laboratory

**CCS:** Liberal Arts/Science

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

**PHED B6G Coeducational and Individual Activity: Golf***1 unit*

**Description:** Includes instruction in techniques, tactics, and physical conditioning related to the sport of golf.

**Note:** UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

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

**PHED B6JD Coeducational and Individual Activity: Jazz Dance (same as 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:** Identical to DANC B6jd. UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

**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 laboratory

**CCS:** Liberal Arts/Science

**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 laboratory

**CCS:** Liberal Arts/Science

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

**PHED B6V Coeducational and Individual Activity:****Beginning Volleyball***1 unit*

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 laboratory

**CCS:** Liberal Arts/Science

**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 appropriate Physical Education activity courses.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

**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**

*2 units*

**Important:** Must meet athletic code eligibility requirements. Field trips may be required.

**Recommended:** PHED B45.

**Hours:** 180 by arrangement (usually 2 hours per day)

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **PHED B11 Intercollegiate Competition for Men: Basketball**

*2 units fall semester, 1 unit spring semester*

**Important:** Student must meet athletic code eligibility requirements.

**Description:** Intercollegiate competition Men's Basketball. Field trips required.

**Hours:** 54 laboratory for each 1

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **PHED B12 Intercollegiate Competition for Men: Track and Field**

*2 units*

**Important:** Student must meet athletic code eligibility requirements.

**Description:** Intercollegiate competition for men in Track and Field. Field trips required.

**Hours:** 180

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **PHED B13 Intercollegiate Competition for Men: Tennis**

*2 units*

**Important:** Must meet athletic code eligibility requirements.

**Note:** Field trips may be required.

**Hours:** 180

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **PHED B14 Intercollegiate Competition for Men: Baseball**

*2 units*

**Important:** Must meet athletic code eligibility requirements.

**Description:** Intercollegiate competition for Men's Baseball. Field trips required.

**Hours:** 180

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **PHED B16 Intercollegiate Competition for Men: Golf**

*2 units*

**Important:** Must meet athletic code eligibility requirements.

**Note:** May be substituted for physical education requirement for

graduation. Field trips may be required.

**Hours:** 180

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **PHED B17 Intercollegiate Competition for Men: Cross Country**

*2 units*

**Important:** Must meet athletic code eligibility requirements.

**Description:** Intercollegiate competition for men in Cross Country. Field trips required.

**Hours:** 180

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **PHED B20 Intercollegiate Competition for Men: Wrestling**

*2 units*

**Important:** Must meet athletic code eligibility requirements.

**Description:** Intercollegiate competition for men's wrestling team. Field trips may be required.

**Hours:** 180

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **PHED B22 Intercollegiate Competition for Women: Tennis**

*2 units*

**Important:** Must meet athletic code eligibility requirements.

**Note:** May be substituted for physical education requirement for graduation. Field trips may be required.

**Hours:** 180

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **PHED B23 Intercollegiate Competition for Women: Soccer**

*2 units*

**Important:** Must meet athletic code eligibility requirements.

**Description:** Intercollegiate soccer for women. Field trips may be required.

**Hours:** 180

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### **PHED B24 Intercollegiate Competition for Women: Golf**

*2 units*

**Important:** Must meet athletic code eligibility code requirements.

May be substituted for physical education requirement for graduation. Field trips may be required.

**Hours:** 180 laboratory

**Repeat:** 3

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges; CSU GE E; BC GE E

### **PHED B25 Intercollegiate Competition for Women: Volleyball**

2 units

**Important:** Must meet athletic code eligibility requirements.  
**Description:** Intercollegiate competition for Women's Volleyball. Travel is required.  
**Hours:** 180  
**Repeat:** 3  
**CCS:** Liberal Arts/Science  
**Transferable:** UC, CSU and private colleges; CSU GE E; BC GE E

### **PHED B26 Intercollegiate Competition for Women: Track and Field**

2 units

**Important:** Must meet athletic code eligibility requirements.  
**Description:** Intercollegiate competition for women in track and field. Travel is required.  
**Hours:** 180  
**Repeat:** 3  
**CCS:** Liberal Arts/Science  
**Transferable:** UC, CSU and private colleges; CSU GE E; BC GE E

### **PHED B27 Intercollegiate Competition for Women: Cross Country**

2 units

**Important:** Must meet athletic code eligibility requirements.  
**Description:** Intercollegiate competition for women in cross country.  
**Note:** Field trips may be required.  
**Hours:** 180  
**Repeat:** 3  
**CCS:** Liberal Arts/Science  
**Transferable:** UC, CSU and private colleges; CSU GE E; BC GE E

### **PHED B28 Intercollegiate Competition for Women: Basketball**

1-2 units

**Important:** Must meet athletic code eligibility requirements.  
**Description:** Intercollegiate basketball competition for women. Specialized training in fundamental skills and team tactics of competitive basketball.  
**Note:** Field trips may be required.  
**Hours:** 90 per unit  
**Repeat:** 3  
**CCS:** Liberal Arts/Science  
**Transferable:** UC, CSU and private colleges; CSU GE E; BC GE E

### **PHED B29 Intercollegiate Competition for Women: Softball**

2 units

**Important:** Must meet athletic code eligibility requirements.  
**Description:** Intercollegiate competition for Women's Softball. Field trips may be required.  
**Hours:** 180  
**Repeat:** 3  
**CCS:** Liberal Arts/Science  
**Transferable:** UC, CSU and private colleges; CSU GE E; BC GE E

### **PHED B31 First Aid**

1 unit

**Description:** Administering first aid in emergency and accident situations. Includes wounds and their care, shock, CPR, injuries, burns, effects of heat and cold and the transportation of the injured. Upon successful completion each student will qualify for an American Red Cross Standard First Aid Card.  
**Hours:** 18 lecture

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **PHED B32 Shape Up**

1-3 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, socialization and individual differences in human behavior.  
**Note:** UC campuses give a maximum of four semester units of credit for appropriate Physical Education activity courses.  
**Hours:** 6 lecture, 30 participation for each 1 unit  
**CCS:** Liberal Arts/Science  
**Transferable:** UC, CSU and private colleges; CSU GE E; BC GE E

### **PHED B33 Intercollegiate Swimming**

2 units

**Description:** Intercollegiate coeducational competition.  
**Note:** May be substituted for physical education requirement for graduation. (UC campuses give a maximum of four semester units of credit for appropriate Physical Education Activity courses.) BC GE E; CSU GE E. Field trips may be required.  
**Hours:** 180  
**Repeat:** 3  
**CCS:** Liberal Arts/Science  
**Transferable:** UC, CSU and private colleges; CSU GE E; BC GE E

### **PHED B36 First Aid and CPR**

3 units

**Recommended:** Reading - one level prior to transfer.  
**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  
**CCS:** Credit Course  
**C-ID:** KIN 101  
**Transferable:** UC, CSU and private colleges; BC GE E

### **PHED B39A Prevention and Care of Athletic Injuries**

3 units

**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 laboratory  
**CCS:** Liberal Arts/Science  
**Transferable:** UC, CSU and private colleges

### **PHED B39B Advanced Athletic Training**

3 units

**Recommended:** BIOL B34 and BIOL B33.  
**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 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### **PHED B40 Introduction to Physical Education**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Exploring employment opportunities in the field of physical education, history and teaching of physical education and the contribution made to the mental, social, and physical well-being of society. Recommended for students pursuing a major or minor in Physical Education or Recreation.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**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

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **PHED B42 Introduction to Kinesiology**

*3 units*

**Recommended:** Reading and Writing – one level prior to transfer.

**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.

**Hours:** 54

**CCS:** Liberal Arts/Science

**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

**CCS:** Credit Course

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

## **Physical Science Courses**

### **PHSC B12 Physical Science**

*4 units*

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Liberal Arts/Science

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

## **Physics Courses**

### **PHYS B2A General Physics-Mechanics and Heat**

*4 units*

**Prerequisites:** MATH BD/MATH B70 with a grade of 'C' or better.

**Corequisites:** Math B1a.

**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 laboratory

**CCS:** Credit Course

**C-ID:** PHYS 105

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

### **PHYS B2B General Physics-Sound, Light, Electricity, Magnetism, Modern Physics**

*4 units*

**Prerequisites:** MATH B1B and PHYS B2a with a '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 laboratory

**CCS:** Credit Course

**C-ID:** PHYS 110

**Transferable:** UC, CSU and private colleges

### **PHYS B4A Mechanics and Wave Motion**

*4 units*

**Recommended:** Reading - one level prior to transfer.

**Prerequisites:** MATH B6a with a grade of 'C' or better.

**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 laboratory

**CCS:** Credit Course

**C-ID:** PHYS 205

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

### **PHYS B4B Heat, Electricity, and Magnetism**

*4 units*

**Recommended:** MATH B6c.

**Prerequisites:** PHYS B4A and MATH B6b with grades 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 laboratory

**CCS:** Credit Course

**C-ID:** PHYS 210

**Transferable:** UC, CSU and private colleges

### **PHYS B4c Optics and Modern Physics**

*4 units*

**Prerequisites:** PHYS B4b and Math B6b 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 laboratory

**CCS:** Credit Course

**C-ID:** PHYS 215

**Transferable:** UC, CSU and private colleges

## Political Science Courses

### POLS B1 American Government: National, State, and Local

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - two levels prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.8; BC GE D.2; BC GE D.3

### POLS B2 Comparative Government

*3 units*

**Recommended:** ENGL B50/ENSL B50 or Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.8; BC GE D.2

### POLS B3 International Politics

*3 units*

**Recommended:** ENGL B50/ENSL B50 or Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.8; BC GE D.2

### POLS B5 Current Issues/American Government

*1-2 units*

**Recommended:** ACDV B50 and ENGL B50

**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)

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges

### POLS B12 Contemporary Issues in California State and Local Government

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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:** ENGL B50. Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.8; BC GE D.2

## Psychology Courses

### PSYC B1A General Psychology

*3 units*

**Prerequisites:** None.

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**C-ID:** PSY 110

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.9; CSU GE E; BC GE D.1; BC GE E

### PSYC B1B Biological Psychology

*3 units*

**Recommended:** Reading and Writing one level prior to transfer.

**Prerequisites:** PSYC B1a with a grade of 'C' or better.

**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

**CCS:** Credit Course

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

### **PSYC B2 Interpersonal and Group Process Skills**

*3 units*

**Recommended:** PSYC B1a. Reading - one level prior to transfer.

Writing - one level prior to transfer.

**Description:** Readings and practice in skills for effective functioning in interpersonal and group settings: including active listening, interviewing, group interaction, decision making and managing conflict. Emphasizes the development of skills and ethical considerations specific to human interaction, relating across differences of race, gender, ethnicity, sexual orientation, and social class.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **PSYC B5 Elementary Statistics for the Behavioral and Social Sciences**

*5 units*

**Prerequisites:** MATH BD/MATH B70 with a grade of 'C' or better.

Completion of or concurrent enrollment in an introductory course: PSYC B1a, SOCI B1, ANTH B1, ECON B1, or POLS B1.

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Statistics as applied to the behavioral and social sciences. Introduces basic terminology and measurement scales associated with basic statistics used in behavioral and social science research. Emphasizes appropriate application and interpretation of measures of central tendency, variation, and correlation, in the use of parametric and nonparametric statistical hypothesis testing.

**Note:** Not open to students who had taken and successfully completed the equivalent course, BEHS B5.

**Hours:** 90 lecture

**CCS:** Liberal Arts/Science

**C-ID:** SOCI 125

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

### **PSYC B6 Research Methods for the Behavioral and Social Sciences**

*4 units*

**Prerequisites:** PSYC B1A and PSYC B5

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**C-ID:** PSY 200

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.9; BC GE B.2

### **PSYC B20 Social Psychology**

*3 units*

**Recommended:** SOCI B1 or PSYC B1a with a grade of 'C' or better. Reading - one level prior to transfer. Writing - one level prior to transfer.

**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. Not open to students who have taken the equivalent course, SOCI B20.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**C-ID:** PSY 170

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.9; BC GE D.1; BC GE D.2

### **PSYC B21 Special Projects**

*1 unit*

**Recommended:** PSYC B1a or PSYC B5 with a minimum grade of 'B', and evaluation by instructor.

**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.

**Note:** Enrollment limitations for students who have successfully completed PSYC B21a, 21b, 21c, and 21d.

**Hours:** 54 laboratory

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **PSYC B30 Human Sexuality**

*3 units*

**Recommended:** PSYC B1A and Reading - one level prior to transfer and Writing - one level prior to transfer

**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

**CCS:** Liberal Arts/Science

**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:** PSYC B1a with a grade of 'C' or better. Reading - one level prior to transfer. Writing - one level prior to transfer.

**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. Psychological disorders and their corresponding treatment protocols are explored.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**C-ID:** PSY 115

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.9; CSU GE E; BC GE D.1; BC GE E

**PSYC B40 Introduction to Lifespan Psychology***3 units***Recommended:** PSYC B1a with a grade of 'C' or higher. Reading - one level prior to transfer. Writing - one level prior to transfer.**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**CCS:** Liberal Arts/Science**C-ID:** PSY 180**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.7; CSU GE D.9; CSU GE E; BC GE D.1**Registered Nursing Courses****NURS B20 Fundamentals of Nursing***4 units***Prerequisites:** Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director.**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 laboratory**CCS:** Occupational Education**Transferable:** CSU and private colleges**NURS B21 Medical Surgical Nursing 1***5 units***Prerequisites:** Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director.**Description:** 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:** \$27.00**Hours:** 45 lecture, 135 laboratory**CCS:** Occupational Education**Transferable:** CSU and private colleges**NURS B22 Pharmacology***3 units***Prerequisites:** Admission and 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. Admission to the Associate Degree Nursing Program and appropriate standing in the Nursing Program are required.

**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 or evaluation of skills by the Program Director.**Description:** 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:** \$27.00**Hours:** 45 lecture, 108 laboratory**CCS:** Occupational Education**Transferable:** CSU and private colleges**NURS B24 Obstetrics - Maternity Nursing***3 units***Prerequisites:** Admission and 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. Admission and appropriate standing in the Associate Degree Nursing Program are required.**Hours:** 27 lecture, 81 laboratory**CCS:** Occupational Education**Transferable:** CSU and private colleges**NURS B25 Mental Health Psychiatric Nursing***3.5 units***Prerequisites:** Admission to the Associate Degree Nursing Program and appropriate standing in the Nursing Program.**Description:** This Level 2 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. Admission to the Associate Degree Nursing Program and appropriate standing

in the Nursing Program are required.

**Hours:** 36 lecture, 81 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **NURS B26 Medical Surgical Nursing 3**

*5.5 units*

**Prerequisites:** Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director.

**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:** \$27.00

**Hours:** 45 lecture, 162 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **NURS B27 Pediatric Nursing**

*3.5 units*

**Prerequisites:** Admission to the Associate Degree Nursing Program and appropriate standing in the 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. Admission to the Associate Degree Nursing Program and appropriate standing in the Nursing Program are required.

**Hours:** 27 lecture, 108 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **NURS B28 Medical Surgical Nursing 4**

*7 units*

**Prerequisites:** Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director.

**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:** \$27.00

**Hours:** 54 lecture, 216 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **NURS B29 Gerontology - Community Nursing**

*2 units*

**Prerequisites:** Appropriate standing in the Associate Degree Nursing Program or evaluation of skills and knowledge by the Program Director.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **NURS B33 Advanced Pharmacology**

*2 units*

**Prerequisites:** Appropriate standing in the RN program.

**Description:** Advanced pharmacology is the development of the theoretical and technical knowledge base necessary in meeting advanced pharmacological needs of the client in a variety of settings. 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. Professional issues and concepts for nursing practice related to intravenous therapy are presented including techniques of intravenous therapy and intravenous drug administration. The student will apply the advanced pharmacology principles in the clinical setting in all nursing courses.

**Hours:** 27 lecture, 27 laboratory

**CCS:** Occupational Education, Credit - not degree applicable

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

### **NURS B70 Role Transition: Bridging Nursing Theory to Practice**

*2 units*

**Prerequisites:** LVN or RN licensure; or Nursing student with evaluation of skills and knowledge by the ADN Program Director.

**Description:** 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 laboratory.

**Hours:** 27 lecture, 27 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level 1 course provides instructional 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 laboratory

**CCS:** Occupational Education

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

### **NURS B201B 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 laboratory designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level 2 course builds upon content from level 1 curriculum and provides instructional guidance to assist students in refining 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 laboratory

**CCS:** Occupational Education

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

### **NURS B201C 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 laboratory designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level 3 course builds upon content from level 2 curriculum and provides instructional guidance to assist students to refine newly acquired skills and develop the competency level expected of entry level nurses. Multimedia and computer assisted instructional materials which support the semester learning objectives are available. Subsequent enrollment in additional semesters will offer the student an opportunity for additional skill and competency development within the subject matter.

**Note:** Offered credit/no credit grading only. Formerly NURS B201L.

**Hours:** 54 laboratory

**CCS:** Occupational Education

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

### **NURS B201D 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 laboratory designed for self-paced practice and mastery of nursing skills necessary for providing safe client care throughout the program. This level 4 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. Multimedia and computer assisted instructional materials which support the semester learning objectives are available.

**Hours:** 54 laboratory

**CCS:** Occupational Education

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

## **Radiologic Technology Courses**

### **RADT B1A Introduction to Radiologic Technology**

*2 units*

**Prerequisites:** Enrollment into the Radiologic Technology Program and MATH BD/MATH B70.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B1B Patient Care**

*2 units*

**Prerequisites:** MEDS B52, Enrollment into the Radiologic Technology Program and BIOL B18.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B2A Radiographic Anatomy and Positioning 1**

*3 units*

**Prerequisites:** RADT B1a, RADT B1b and RADT B4b with grades of 'C' or better.

**Description:** Instruction and laboratory practice in radiographic positioning of the chest, abdomen, lower and upper extremities, arthrography, bone surveys and bone densitometry with correlated film anatomy.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B2B Radiographic Anatomy and Positioning 2**

*3 units*

**Prerequisites:** RADT B2a, B3a, and B4b (courses equivalent to completion of the first fall semester of the Radiologic Technology Program).

**Description:** Instruction and laboratory practice in radiographic positioning of the vertebral column, bony thorax, gastrointestinal, biliary and urinary systems with correlated film anatomy.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**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 laboratory 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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B3A Radiographic Principles 1**

*3 units*

**Prerequisites:** RADT B1a, B1b, B4a (courses equivalent to completion of the first summer session of the Radiologic Technology Program).

**Description:** Principles of x-ray tube construction, prime exposure factors, beam restriction and scatter radiation, grids, radiographic film, image receptors and intensifying screens, image processing, sensitometry and digital imaging.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B3B Radiographic Principles 2**

*3 units*

**Prerequisites:** RADT B2a, B3a, B4b, and B12 with grades of 'C' or better.

**Description:** Principles of radiographic image analysis including density, contrast, detail and distortion. Principles of exposure control systems, mobile radiography, and fluoroscopy.

**Hours:** 36 lecture, 54 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B4A Introduction to Clinical Education**

*1.5 units*

**Prerequisites:** Acceptance into the Radiologic Technology Program.

**Description:** Orientation to clinical education including introduction to patient transportation techniques, image processing, patient registration and file room, equipment orientation, general patient care and safety training. Observation and introduction to basic radiographic procedures stressing radiation safety and protection.

**Materials Fee:** \$20.00

**Hours:** 94 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B4B Clinical Education 1**

*4 units*

**Prerequisites:** RADT B4A

**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:** 256 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B5 Radiation Physics**

*3 units*

**Prerequisites:** Enrollment in Radiologic Technology Program.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B6 Clinical Education 2**

*4 units*

**Prerequisites:** RADT B4b with a grade of 'C' or better.

**Description:** Supervised clinical experiences are provided to perfect skills in a variety of basic radiographic procedures. Case studies of radiographic procedures discussing anatomy, pathology, positioning and technical factors of image quality are analyzed on a case-by-case basis.

**Materials Fee:** \$20.00

**Hours:** 18 lecture, 238 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B7 Clinical Education 3**

*6.5 units*

**Prerequisites:** Completion of the first spring semester of the Radiologic Technology Program.

**Description:** Supervised clinical experiences are provided to perfect skills in a variety of radiographic procedures. Case studies of radiographic procedures discussing the fundamentals of anatomy, positioning and technical factors of film quality are analyzed on a case-by-case basis. Extension of radiographic procedures demonstrated in RADT B2a, B2b.

**Materials Fee:** \$20.00

**Hours:** 18 lecture, 382 laboratory

**CCS:** Occupational Education

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B10 Clinical Education 4**

*6.5 units*

**Prerequisites:** Completion of second summer of Radiologic Technology Program.

**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. Correlated with RADT B2c.

**Materials Fee:** \$20.00

**Hours:** 18 lecture, 366 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B11 Radiographic Pathology**

*2 units*

**Prerequisites:** Completion of second fall semester of Radiologic Technology Program.

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B12 Radiobiology and Radiation Protection**

*2 units*

**Prerequisites:** RADT B1a, B1b, B4a (courses equivalent to completion of the first summer session of the Radiologic Technology Program).

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **RADT B13 Clinical Education 5**

*6 units*

**Prerequisites:** RADT B10 with a grade of 'C' or better and successful completion of second fall semester of Radiologic Technology Program.

**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:** 384 laboratory

**CCS:** Occupational Education

**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

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

## **Sociology Courses**

### **SOCI B1 Introduction to Sociology**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Scientific study of human social behavior: assumes that external forces shape individual behavior. 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

**CCS:** Liberal Arts/Science

**C-ID:** SOCI 110

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.10; BC GE D.2

### **SOCI B2 Problems of Modern Society**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**C-ID:** SOCI 115

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.10; BC GE D.2

### **SOCI B20 Social Psychology**

*3 units*

**Recommended:** SOCI B1 or PSYC B1a with grades of 'C' or better. Reading - one level prior to transfer. Writing - one level prior to transfer.

**Description:** Examines the effects of social influence on individual behavior: This includes the study of conformity, compliance, 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 taken the equivalent course, PSYC B20.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.10; BC GE D.1; BC GE D.2

### **SOCI B21 Special Projects**

*1 unit*

**Recommended:** Completion of at least one introduction level sociology course or higher, and evaluation by instructor. Reading - one level prior to transfer. Writing - one level prior to transfer.

**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.

**Note:** Enrollment limitations for students who have successfully completed SOCI B21a, 21b, 21c, and 21d.

**Hours:** 18 lecture  
**CCS:** Liberal Arts/Science.

### **SOCI B28 Introduction to Gender**

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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  
**CCS:** Liberal Arts/Science  
**C-ID:** SOCI 140

**Transferable:** UC, CSU and private colleges; IGETC 4; 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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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  
**CCS:** Liberal Arts/Science  
**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.3; CSU GE D.10; BC GE D.2

### **SOCI B45 Minority Relations**

*3 units*

**Recommended:** SOCI B1 with a grade of 'C' or better. Reading - one level prior to transfer. Writing - one level prior to transfer.

**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  
**CCS:** Liberal Arts/Science  
**C-ID:** SOCI 150  
**Transferable:** UC, CSU and private colleges; IGETC 4; CSU GE D.3; CSU GE D.10; BC GE D.2

## **Soil Science Courses**

### **SOIL B1 Introduction to Soil Science**

*3 units*

**Recommended:** Reading and writing - one level prior to transfer. Mathematics - 2 Levels Prior to Transfer.

**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 laboratory  
**CCS:** Credit Course  
**Transferable:** UC, CSU and private colleges; BC GE B.1

## **Spanish Courses**

### **SPAN B1 Elementary Spanish I**

*4 units*

**Recommended:** Writing - one level prior to transfer and Reading - one level prior to Transfer.

**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  
**CCS:** Credit course  
**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*

**Recommended:** Writing - one level prior to transfer and Reading - one level prior to transfer.

**Prerequisite:** SPAN B1 or SPAN B1AB with a grade of 'C' or better.  
**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  
**CCS:** Credit course  
**Transferable:** UC, CSU and private colleges; IGETC 6.A; CSU GE C.2; BC GE C.2

### **SPAN B3 Intermediate Spanish I**

*4 units*

**Recommended:** Reading - one level prior to transfer.  
**Prerequisite:** SPAN B2ab or SPAN B2 with a grade of 'C' or better (or Native Speaker or Equivalent).

**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.  
**Hours:** 72 lecture  
**CCS:** Credit Course  
**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*

**Prerequisite:** SPAN B3 or SPAN B35 with a grade of 'C' or better  
**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  
**CCS:** Liberal Arts/Science  
**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.**Hours:** 72 lecture**CCS:** Credit Course**Transferable:** UC, CSU and private colleges; IGETC 3.B; 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.**Hours:** 72 lecture**CCS:** Credit Course**Transferable:** UC, CSU and private colleges; IGETC 6.A; CSU GE C.2**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, i.e. Special Studies/German. Field trips may be required.**Hours:** 9 hours for .5 unit**CCS:** Liberal Arts/Science**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**CCS:** Liberal Arts/Science**Transferable:** UC, 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**CCS:** Liberal Arts/Science**Transferable:** UC, 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)**CCS:** Liberal Arts/Science**Transferable:** Not degree applicable. Not transferable.**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**CCS:** Liberal Arts/Science**Transferable:** Not degree applicable. Not transferable.**SPST B210 Independent Reading Program***1-2 units***Recommended:** Reading - one level prior to transfer.**Description:** Independent reading of books in the social sciences, physical sciences and humanities under Library staff supervision.**Hours:** 54 hours for each 1 unit**CCS:** Liberal Arts/Science**Transferable:** CSU and private colleges**Student Development Courses****STDV B1 Educational Planning***0.5 unit***Recommended:** Reading - one level prior to transfer.**Description:** Designed to assist students in understanding college requirements and to help them in making educational plans. Required for the associate degree. Satisfies the 0.5 units educational planning requirement for graduation from Bakersfield College.**Note:** Required for both the AA and AS degrees.**Hours:** 9 lecture**CCS:** Liberal Arts/Science**Transferable:** CSU and private colleges**STDV B2 Career Decision Making/Planning***1.5 units***Recommended:** Reading - one level prior to transfer.**Description:** An introduction to career search and strategies. Provides an overview of the career decision-making process including goal setting, decision making and research in the job market. Satisfies the 0.5 educational planning graduation requirement for Bakersfield College.**Hours:** 27 lecture**CCS:** Liberal Arts/Science**Transferable:** CSU and private colleges

## **STDV B3 Career, Life, and Educational Planning**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Assists students with self-exploration, career transitions and career-life planning in order to achieve success in a diverse society. Critical thinking skills will be utilized through a systematic approach to career development by examining values, interests, skills, life roles, personality type, personal self-management, decision making and goal-setting throughout the life span. Students will develop educational options, possible career pathways and majors, and a student educational plan. Job search strategies and resume writing will be introduced. Satisfies the 0.5 unit educational planning requirement for graduation from Bakersfield College.

**Hours:** 54 lecture

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges; CSU GE E

## **STDV B4 International Student Orientation and Educational Planning**

*1 unit*

**Recommended:** Reading - one level prior to transfer.

**Description:** Designed to give international students a practical training in studying effectively, the techniques for survival within the college setting, cultural adjustment cycle, immigration regulations and making their educational plan for college studies. Satisfies 0.5 unit educational planning requirement for graduation from Bakersfield College.

**Hours:** 18 lecture

**Repeat:** 1

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

## **STDV B6 Tools for College Survival**

*2 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Integrates personal growth, learning techniques academic and career success, problem solving, critical, and creative thinking. 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. Elective credit only.

**Hours:** 36 lecture

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges; CSU GE E; BC GE E

## **Technical Mathematics Courses**

### **TECM B52 Introduction to Technical Mathematics**

*3 units*

**Description:** Elementary course in mathematics intended primarily for technology, majors covering arithmetic processes, ratio, proportion, elementary algebra, geometric forms and construction, and elementary trigonometry.

**Hours:** 54 lecture

**CCS:** Occupational Education

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

## **Theatre Arts Courses**

### **THEA B1 Introduction to Acting**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

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

### **THEA B2A Elements of Acting**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Prerequisites:** THEA B1 or By audition.

**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

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

### **THEA B2B Elements of Acting**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Prerequisites:** THEA B1 and THEA B2A or by audition.

**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

**CCS:** Liberal Arts/Science

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

### **THEA B12A Introduction to Shakespeare**

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

**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*

**Recommended:** Reading and Writing - one level prior to transfer.

**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.

**Hours:** 54 lecture

**CCS:** Credit course

**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

**CCS:** Credit course

**Transferable:** UC, CSU and private colleges

### THEA B20 Introduction to Theatre

*3 units*

**Recommended:** Reading and Writing - one level prior to transfer.

**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

**CCS:** Liberal Arts/Science

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

### THEA B27 Acting Theatre Laboratory

*1-3 units*

**Prerequisites:** Audition.

**Recommended:** Reading - one level prior to transfer.

**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

**Repeat:** 3

**CCS:** Liberal Arts/Science

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

### THEA B28 Technical Theatre Laboratory

*1 unit*

**Recommended:** Reading - one level prior to transfer.

**Description:** Participation in set construction, lighting, makeup, costume, properties, or any other technical area of theatrical productions.

**Hours:** 54 laboratory

**Repeat:** 3

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### THEA B31 Introduction to Film Studies

*3 units*

**Recommended:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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:** Reading - one level prior to transfer. Writing - one level prior to transfer.

**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

## Vocational Nursing Courses

### VNRS B1 Nursing Fundamentals

*3 units*

**Prerequisites:** Admission to the Vocational Nursing Program.

**Corequisite:** VNRS B1LV

**Description:** Provides a foundation of basic nursing arts and sciences necessary for the practice of nursing. Professional issues and trends of nursing are identified along with the development of an understanding of the nursing process. Concepts of the nurse, client and health care environment, professional nursing and nursing skills, growth and development of the adult, human needs in health and illness, basic physiological needs, and providing a safe environment are presented.

**Hours:** 54 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### VNRS B1G Gerontological Nursing

*1 unit*

**Prerequisites:** Admission to the Vocational Nursing Program.

**Corequisite:** VNRS B1LV

**Description:** Provides a foundation of basic gerontological nursing using demographics, theories of aging and growth and development concepts as a framework for presenting health problems and special concerns of the elderly. Legal and ethical issues, economics, and healthcare of older adults using a nursing process approach are discussed.

**Hours:** 18 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### VNRS B1LV Vocational Nursing Laboratory

*6 units*

**Prerequisites:** Admission to the Vocational Nursing Program and concurrent enrollment in VNRS B1 and VNRS B75 and VNRS B1G.

**Description:** Laboratory course correlated with the first semester theory course in the Vocational Nursing Program. The major focus will be on learning fundamental nursing skills with application in geriatric and medical surgical settings. Incorporated is the nursing process which utilizes the skills of assessment, planning, intervention and evaluation providing a systemic approach to nursing practice.

**Hours:** 324 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### VNRS B6 Pediatric Nursing

*1.5 units*

**Prerequisites:** Concurrent enrollment in VNRS B97LV.

**Description:** Provides a foundation for pediatric nursing using growth and development concepts as a framework for presenting health problems and special concerns of the pediatric client. Communication, anticipatory guidance, response to hospitalization, legal and ethical issues and health care of pediatric clients are discussed. Appropriate standing in the VN Program and concurrent enrollment in VNRS B97LV are required.

**Hours:** 27 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### VNRS B7 Parent/Newborn Nursing

*1.5 units*

**Prerequisites:** Appropriate Standing in the Vocational Nursing

Program

**Corequisite:** VNRS B87LV. The Board of Vocational Nursing and Psychiatric Technicians requires this course to be offered as a corequisite.

**Description:** This course provides an overview of contemporary family-centered childbirth, incorporating the self-care movement and changing roles of the nurse. Legal and ethical issues of maternal/newborn nursing are discussed. Coverage of maternal/newborn nursing uses a nursing process approach for antepartum, intrapartum, postpartum, and neonatal care.

**Hours:** 27 lecture

**CCS:** Liberal Arts/Science

**Transferable:** CSU and private colleges

### **VNRS B31AB Basic Pharmacology**

*2 units*

**Prerequisites:** Admission to the Vocational Nursing Program.

**Description:** Provides a foundation for basic pharmacological nursing using concepts of growth and development throughout the life span, pharmacology and drug administration as a framework for presenting the problems and special concerns of the client using medications. Legal and ethical issues, nursing responsibilities and client participation associated with medication administration are discussed. A nursing process approach is utilized throughout every aspect of drug study and drug administration.

**Hours:** 36 lecture

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **VNRS B50B Advanced Pharmacology, Part B**

*0.5 unit*

**Prerequisites:** Appropriate standing in the VN Program and VNRS B31AB.

**Description:** Designed to prepare the vocational nurse to function safely when administering medications to a group clients. Students will be administering medications to more complex clients in the laboratory setting. Expounds on principles learned in NURS B31ab.

**Hours:** 9 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **VNRS B68 Basic Medical Surgical Nursing**

*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

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **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 theory 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

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory 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:** \$27.00

**Hours:** 324 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **VNRS B75 Medical Surgical Nursing 1**

*3.5 units*

**Prerequisites:** Appropriate standing in VN Program.

**Corequisite:** VNRS B1LV. The Board of Vocational Nursing and Psychiatric Technicians requires this course to be offered as a corequisite.

**Description:** This course provides a study of etiology, pathophysiology, assessment, planning and evaluation of adult clients with gastrointestinal, skin, eye, ear, upper airway, nutritional genitourinary, and fluid and electrolyte disorders. Integrated into course are beginning concepts of the therapeutic, use of drugs, diet therapy, and the physiological and psychosocial problems. Students are required to initiate critical thinking skills when dealing with



clients and families. Concepts and skills in course are correlated in laboratory settings presented in the corresponding VNRS B1LV.

**Hours:** 63 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory settings presented in VNRS B79L (Intermediate Medical Surgical Lab).

**Hours:** 162 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory 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:** \$27.00

**Hours:** 324 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory setting in VNRS 89L (Advanced Medical Surgical Nursing Lab).

**Hours:** 27 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **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

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **VNRS B85 Medical Surgical Nursing II**

*2.5 units*

**Prerequisites:** Appropriate standing in the nursing program and concurrent enrollment in VNRS B85LV.

**Recommended:** Reading - one level prior to transfer.

**Description:** Provides a study of etiology, pathophysiology, assessment, planning and evaluation of adult clients with cardiovascular, peripheral vascular and respiratory disorders. Knowledge imparted builds on nursing theory from the previous medical surgical nursing course (VNRS B75). Emphasis will be placed on developing critical thinking skills. Concepts and skills in this course will be correlated in the various laboratory settings presented in the corresponding VNRS B85LV.

**Note:** Not open to students who have taken VNRS B80.

**Hours:** 45 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **VNRS B85LV Medical Surgical Nursing II – Clinical Laboratory**

*1.5 units*

**Prerequisites:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B85.

**Description:** Lab course which is correlated with the corresponding medical surgical course in the Vocational Nursing Program. Focus of course is team leading, time management in caring for two clients, providing medications to a group of clients, and improving on skills learned in Medical Surgical Nursing I. Incorporated into this course is the utilization of intermediate assessment, planning, intervention and evaluation under clinical supervision.

**Hours:** 81 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **VNRS B86 Medical Surgical Nursing III**

*4 units*

**Prerequisites:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B86LV.

**Description:** Provides a study of etiology, pathophysiology, assessment, planning and evaluation of adult clients with musculoskeletal, connective tissue, and endocrine disorders. Knowledge imparted builds on nursing theory from the previous medical surgical nursing courses (VNRS B75, VNRS B85). Emphasis will be placed on developing critical thinking skills. Concepts and

skills in this course will be correlated in the various laboratory settings presented in the corresponding VNRS B86LV.

**Hours:** 72 lecture

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **VNRS B86LV Medical Surgical Nursing III – Clinical Laboratory**

*3 units*

**Prerequisites:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B86.

**Description:** Laboratory course correlated with the corresponding medical surgical course in the Vocational Nursing Program. Focus is team leading, time management in caring for two clients, providing medications to a group of clients and in improving on skills learned in Medical Surgical Nursing II. Incorporated into course is the utilization of intermediate assessment, planning, intervention and evaluation under clinical supervision.

**Hours:** 162 laboratory

**CCS:** Occupational Education

### **VNRS B87LV Maternal Newborn / Clinical Laboratory**

*1.5 units*

**Prerequisites:** Appropriate standing in the Vocational Nursing Program.

**Corequisite:** VNRS B7. The Board of Vocational Nursing and Psychiatric Technicians requires this course to be offered as a corequisite.

**Description:** This laboratory course is correlated with the corresponding maternal-newborn course in the Vocational Nursing Program. Incorporated is the nursing process which utilizes the skills of assessment, planning, intervention and evaluation providing a systemic approach to nursing practice.

**Hours:** 81 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory setting in VNRS B88L (Maternal/Child Nursing lab).

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **VNRS B88L Maternal Child Nursing Lab**

*3 units*

**Prerequisite:** Appropriate standing in the Vocational Nursing Program.

**Corequisite:** VNRS B88

**Description:** This Vocational Nursing laboratory 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 laboratory 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 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **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 laboratory setting presented in VNRS 89L (Advanced Medical Surgical Nursing Lab).

**Hours:** 63 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **VNRS B89L Advanced Medical Surgical Nursing Lab**

*3 units*

**Prerequisite:** Appropriate standing in the Vocational Nursing Program.

**Corequisite:** VNRS B89

**Description:** This Vocational Nursing laboratory 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:** \$27.00

**Hours:** 162 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

**VNRS B95 Medical Surgical Nursing 4***4 units***Prerequisites:** Appropriate standing in the VN Program and concurrent enrollment in VNRS B95LV.**Description:** Provides a student of etiology, pathophysiology, assessment, planning and evaluation of adult clients with more complex and critical medical surgical problems and disease states, including multi-system involvement and trauma. Emphasis placed on advanced medical skills. Concepts and skills in this course will be correlated in the various clinical settings presented in the Medical-Surgical Laboratory.**Hours:** 72 lecture**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**VNRS B95LV Medical Surgical Nursing 4 – Clinical Laboratory***2.5 units***Prerequisites:** Appropriate standing in VN Program and concurrent enrollment in VNRS B95.**Description:** Laboratory course which is correlated with the corresponding medical surgical course in the Vocational Nursing Program. Focus is team leading, time management in caring for two clients, providing medications to a group of clients and improving on skills learned in Medical Surgical Nursing III. Also covers the utilization of intermediate assessment, planning, intervention and evaluation under clinical supervision.**Hours:** 135 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**VNRS B96 Medical Surgical Nursing 5***2 units***Prerequisites:** Appropriate standing in VN Program and concurrent enrollment in VNRS B96LV.**Description:** Provides a study of etiology, pathophysiology, assessment, planning and evaluation of adult clients with more complex and critical medical surgical problems and disease states, including multi-system involvement and trauma. Emphasis placed on advanced medical skills. Concepts and skills in this course will be correlated in the various clinical settings presented in the Medical-Surgical Laboratory.**Hours:** 36 lecture**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**VNRS B96LV Medical Surgical Nursing 5/Laboratory***2 units***Prerequisites:** Appropriate standing in the Vocational Nursing Program and VNRS B96.**Description:** Laboratory course which is correlated with the corresponding medical surgical course in the Vocational Nursing Program. Focus is team leading, time management in caring for two clients, providing medications to a group of clients and in improving on skills learned in Medical Surgical Nursing IV. Incorporated into course is the utilization of intermediate assessment, planning, intervention and evaluation under clinical supervision.**Hours:** 108 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**VNRS B97LV Pediatrics – Clinical Laboratory***1.5 units***Prerequisites:** Appropriate standing in VN Program and concurrent

enrollment in VNRS B6.

**Description:** Laboratory course which is correlated with the corresponding pediatric course in the Vocational Nursing Program. Incorporated is the nursing process which utilizes the skills of assessment, planning, intervention and evaluation providing a system approach to nursing practice.**Note:** Not open to students who have taken the equivalent course, VNRS B91LV.**Hours:** 81 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**Water Technology 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**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**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**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**WTRT B53 Water and Wastewater Analysis***3 units***Recommended:** High school chemistry or job related experience. Reading - one level prior to transfer.**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**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**WTRT B61 Advanced Water Treatment***3 units***Prerequisites:** Completion of Basic H2O treatment or comparable course. Field trips required.**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.**Hours:** 54 lecture**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## Welding Courses

### WELD B1A Introduction to Oxygen Acetylene Welding and Cutting

*2 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Properties and characteristics of metals. Safety, theory, and practical experience in oxy-acetylene welding, cutting, and joint design, codes and weld testing. Not open to students who have taken WELD B1ab.

**Note:** Elective credit only.

**Materials Fee:** \$30.00 for project materials.

**Hours:** 27 lecture, 27 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### WELD B1B Introduction to the Welding Processes

*2 units*

**Recommended:** Reading - one level prior to transfer.

**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.

**Note:** Elective credit only.

**Materials Fee:** \$30.00 will apply towards steel, welding rods, and welding resume for industry AWS certification.

**Hours:** 27 lecture, 27 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### WELD B53A Shielded Metal Arc Welding

*2 units*

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### WELD B53B Shielded Metal Arc Welding 2

*2 units*

**Recommended:** WELD B1a, WELD B1b, and Reading - one level prior to transfer

**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 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### WELD B54A Blueprint Reading for Welders and Machinists

*3 units*

**Recommended:** Reading - one level prior to transfer.

**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

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### WELD B54B Template Development and Layout for the Welder

*3 units*

**Recommended:** Reading - one level prior to transfer.

**Description:** Technical skills and critical thinking in layout techniques including layout situations, mathematical and pipe fitting terminology used in the industry.

**Hours:** 54 lecture

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### WELD B55A Structural Plate Certification I

*2 units*

**Recommended:** Reading - one level prior to transfer.

**Prerequisite:** WELD B53a with a grade of 'C' or better.

**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 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### WELD B55B Structural Plate Certification II

*2 units*

**Recommended:** Reading - one level prior to transfer.

**Prerequisite:** WELD B53a with a grade of 'C' or better.

**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 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### WELD B55C ASME Pipe Certification

*2 units*

**Recommended:** Reading - one level prior to transfer.

**Prerequisites:** WELD B55a or WELD B55b with a grade of "C" or better OR evaluation of students' welding skills and knowledge.

**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 laboratory

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

**WELD B55D ASME Pipe Certification***2 units***Recommended:** Reading - one level prior to transfer.**Prerequisite:** WELD B55a or WELD B55b with a grade of "C" or better OR evaluation of student's welding skills and knowledge.**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 laboratory**CCS:** Credit Course**Transferable:** Associate Degree only. Not transferable.**WELD B55E API and Related Certification Testing***2 units***Recommended:** Reading - one level prior to transfer.**Prerequisites:** WELD B55c or WELD B55d with grades of "C" or better OR evaluation of students' skills and knowledge equivalent to WELD B55c and WELD B55d.**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 laboratory**CCS:** Credit Course**Transferable:** Associate Degree only. Not transferable.**WELD B55F API and Related Certification Testing***2 units***Recommended:** Reading - one level prior to transfer.**Prerequisites:** WELD B55c and WELD B55d with grades of "C" or better OR evaluation of student's welding skills and knowledge equivalent to WELD B55a and WELD B55b.**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 laboratory**CCS:** Credit Course**Transferable:** Associate Degree only. Not transferable.**WELD B65AB Welded Steel Structures***3 units***Recommended:** Previous class or experience in GMAW (gas metal arc welding) and Reading - one level prior to transfer.**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 laboratory**CCS:** Credit Course**Transferable:** Associate Degree only. Not transferable.**WELD B74A Introduction to GMAW (Gas Metal Arc Welding) and FCAW (Flux Core Arc Welding)***2 units***Recommended:** Reading - one level prior to transfer and WELD B1B or WELD B53A with a grade of "C" or better or one year work experience as a welder.**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.

**Materials Fee:** \$25.00 will apply towards steel, welding rods, project: welding resume for industry AWS certification.**Hours:** 27 lecture, 27 laboratory**CCS:** Credit Course**Transferable:** Associate Degree only. Not transferable.**WELD B74B Introduction to Gas Tungsten Arc Welding***2 units***Recommended:** WELD B1a or WELD B53a with grades of 'C' or better, or one year work experience as a welder. Reading - one level prior to transfer.**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 laboratory**CCS:** Occupational Education**Transferable:** Associate Degree only. Not transferable.**WELD B81 Introduction to Welding and Cutting***2 units***Prerequisites:** Enrollment in C6 grant tract. Students will complete a C6 Orientation, and enroll in a cohort based program of 6 classes.**Description:** Properties and characteristics of metals. Safety, theory, and practical experience in oxy-acetylene cutting, plasma arc cutting, gas metal arc welding, flux cored arc welding, shielded metal arc welding, and use of shear and brake.**Hours:** 27 lecture, 27 laboratory**CCS:** Credit Course**Transferable:** Not degree applicable. Not transferable.**WELD B90 General Welding***6 units***Description:** Entry-level welding skill development in modern welding and cutting processes, theory and practice.**Hours:** 48 lecture, 144 laboratory**CCS:** Occupational Education**Transferable:** Not degree applicable. Not transferable.**Woodworking Courses****WOOD B1 Introduction to Woodworking Technologies***3 units***Recommended:** Reading - one level prior to transfer.**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. May be transferable as an elective.**Materials Fee:** \$45.00 to cover cost of expendable materials (abrasives, adhesives, millwork items, etc.)**Hours:** 27 lecture, 81 laboratory**CCS:** Occupational Education**Transferable:** CSU and private colleges**WOOD B2 Furniture and Cabinetmaking***3 units*

**Recommended:** Reading - one level prior to transfer.

**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 laboratory

**CCS:** Occupational Education

**Transferable:** CSU and private colleges

### **WOOD B5 Intermediate Cabinetmaking**

*3 units*

**Recommended:** 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 laboratory

**CCS:** Occupational Education

**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 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

### **WOOD B65B Advanced Cabinetmaking**

*3 units*

**Prerequisites:** WOOD B65a 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.

**Material Fee:** \$45.00 for project materials (glue, hardware, dowels, biscuits, and finishing products. Excludes lumber).

**Hours:** 27 lecture, 81 laboratory

**CCS:** Occupational Education

**Transferable:** Associate Degree only. Not transferable.

## **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**

*1-8 units*

**Prerequisites:** Declared major or occupational goal and evaluation 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.

**Hours:** 60 - 600

**Repeat:** 3

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **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.

**Hours:** Paid 75 hours per unit (75 - 600)

**Repeat:** 3

**CCS:** Credit Course

**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.

**Hours:** Unpaid 60 hours per unit (60 - 480)

**Repeat:** 3

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **WEXP B249 Cooperative Work Experience Education**

*1-4 units*

**Prerequisites:** Declared major or occupational goal, concurrent enrollment in seven or more units (including CWEE units, except summer school) and evaluation of student's qualifications and objectives.

**Description:** College credit for learning experiences obtained on the job in accordance with a training plan developed cooperatively between the employer, college and student.

**Hours:** 60 - 300

**Repeat:** 3

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **WEXP B249 Cooperative Work Experience Education - Paid**

*1-4 units*

**Prerequisites:** Declared major or occupational goal, concurrent enrollment in seven or more units (including CWEE units, except summer school) 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 employer, college and student.

**Hours:** Paid 75 hours per unit (75 – 300)

**Repeat:** 3

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **WEXP B249 Cooperative Work Experience Education - Unpaid**

*1-4 units*

**Prerequisites:** Declared major or occupational goal, concurrent enrollment in seven or more units (including CWEE units, except summer school) 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.

**Hours:** Unpaid 60 hours per unit (60 – 240)

**Repeat:** 3

**CCS:** Credit Course

**Transferable:** CSU and private colleges

### **WEXP B250 General Work Experience Education**

*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 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:** 60 - 225

**Repeat:** None

**CCS:** Credit Course

**Transferable:** Associate Degree only. Not transferable.

### **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)

**Repeat:** None

**CCS:** Credit Course

**Transferable:** Associate degree only. Not transferable.

### **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

**CCS:** Credit Course

**Transferable:** Associate degree only. Not transferable.