

## BIOLOGICAL SCIENCES

### BIOL 100 INTRODUCTION TO THE LIFE SCIENCES

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Study of the nature of the physical and chemical aspects of life, the concepts of cellular biology, life as it exists on earth today, plant and animal interrelationships and interdependencies, and the role of humans in the world of living things. Transfer: CSU, UC\*.

### BIOL 103 NATIVE PLANTS AND WILDFLOWERS

*Units (Grade Option) 3; Class Hours: Minimum of 32 lecture/48 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Study of the native ferns, trees, shrubs and wild flowers of San Mateo County. Mainly fieldwork, designed to allow the student to acquire skills in collection and identification of the flora of any region. Transfer: CSU.

### BIOL 110 PRINCIPLES OF BIOLOGY

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* An introductory lecture/lab course designed for the non-biological sciences major and recommended for the lab science transfer requirement. This course stresses biological perspective and thought, classification of organisms and their evolution, ecology, energy exchange and life processes, reproduction, heredity and diversification. Transfer: CSU, UC.

### BIOL 130 HUMAN BIOLOGY

*Units 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Study of biological principles using the human body as a model. The structure and function of the major organ systems are covered as well as some of their common diseases and the medical responses. Heredity and human development are also included. Transfer: CSU, UC.

### BIOL 225 BIOLOGY OF ORGANISMS (CAN BIOL SEQ A = BIOL 225 + 230)

*Units 5; Class Hours: Minimum of 48 lecture/96 lab/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): None. Description:* This course is designed for biology majors and emphasizes the evolution, classification, biodiversity, ecology, population genetics, and structure and function of representatives of the various kingdoms of organisms. Population ecology, community ecology and behavioral biology are included topics and are examined from today's perspective. Transfer: CSU, UC.

### BIOL 230 INTRODUCTION TO CELL BIOLOGY (CAN BIOL SEQ A = BIOL 225 + 230)

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): CHEM 192 or 210. Description:* This course is designed for biology majors and provides an introduction to life functions at the cellular level. The course covers the cellular level of structure and the macromolecular architecture of the cell, the functional processes of cellular energetics, chemical regulation, photochemical activities, molecular genetics, recombinant DNA, and genetic engineering. Transfer: CSU, UC.

### BIOL 240 GENERAL MICROBIOLOGY (CAN BIOL 14)

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): CHEM 192, 210 or 410 or equivalent, and either BIOL 110 or 130 or equivalent. Description:* Introduction to microbial life in nature, the molecular and biochemical characteristics of microorganisms, and the techniques and procedures used by microbiologists. Emphasis is placed on those microbes that play an important role in human daily life, especially those that cause disease. Laboratory emphasizes isolation, cultivation and identification of bacteria. Transfer: CSU, UC.

### BIOL 250 HUMAN ANATOMY (CAN BIOL 10) (CAN BIOL SEQ B = BIOL 250 + 260)

*Units 4; Class Hours: Minimum of 48 lecture/48 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BIOL 100, 110 or 130; Description:* Students learn the gross and microscopic structure of the human body through laboratory study of anatomy models and prosected human cadavers. Intended for students in allied health areas such as nursing, radiologic technology, physical therapy, dental hygiene and physical education. This course is an elective for pre-dental, pre-medical and pre-veterinary students. Transfer: CSU, UC.

### BIOL 260 HUMAN PHYSIOLOGY (CAN BIOL 12) (CAN BIOL SEQ B = BIOL 250 + 260)

*Units 5; Class Hours: Minimum of 48 lecture/96 lab/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 120 or 122; Prerequisite(s): BIOL 110 or 130 or 225 or 250 or 230 or 240; CHEM 192 or 210 or 410; Description:* Students learn through lecture and laboratory experiences how the organ systems function in maintaining homeostasis, regulating change and growth processes in humans. Intended for students in allied health areas such as nursing, radiologic technology and physical education and for those in related fields such as psychology. This course is an elective for pre-dental and pre-medical students. Transfer: CSU, UC.

### BIOL 310 NUTRITION (CAN FCS 2)

*Units 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400, and MATH 111; Prerequisite(s): None. Description:* Comprehensive introduction to scientific principles of nutrition and the interrelationships of metabolism; nutrient functions, structure and food sources; health consequences of nutrient excesses, deficiencies and diet related chronic diseases. Emphasis is placed on evaluating the nutrient content of foods, applying information to personal diet, and using reference tools. Transfer: CSU, UC.

## BUSINESS/OFFICE TECHNOLOGY

(See also courses in Computer Information Science and Systems, Management, and Real Estate)

### BUS. 100 SURVEY OF BUSINESS

*Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Introduction to American business practices in the global environment including such topics as economics, ethics, entrepreneurship, organizational development, management, customer/enterprise relations, information management, accounting, securities, and financial institutions. Transfer: CSU, UC.

**BUS. 101 HUMAN RELATIONS IN BUSINESS**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Broad overview of the basic psychological principles operating in family, social, and business relationships. Other topics examined are perception, self-image, self-management, prejudice, creativity, and resistance to change. Recommended for all business majors. (Qualifies as CEU credits for nurses.) Transfer: CSU.

**BUS. 103 INTRODUCTION TO BUSINESS INFORMATION SYSTEMS (CAN BUS 6)**

*Units 3; Class Hours: Minimum of 48 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Overview of business computer systems including hardware, software, flow-charting, and programming in BASIC. Introductory units on the microcomputer and software packages (spreadsheets, word processing, database, and DOS commands) used in business are analyzed also. This course is designed to meet the requirements of the transfer business major. Transfer: CSU, UC.

**BUS. 108 BUSINESS WRITING AND PRESENTATION METHODS**

*Units (Grade Option) 1-3; Class Hours: Minimum of 16-48 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 430. Description:* Overview of business writing principles used for letters, memorandums, and reports. Other topics include writing e-mail notes, designing business presentations, and using computer word processing and presentation software packages. Transfer: CSU.

**BUS. 110 BUSINESS ARITHMETIC**

*Units (Grade Option) 1-3; Class Hours: Minimum of 16-48 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* Review of basic arithmetic skills--addition, subtraction, multiplication, division, fractions, and decimals. Problem-solving skills are developed in the use of basic arithmetic operations applied to business problems. Units do not apply toward AA/AS degree. Open entry/Open Exit. May be repeated for credit up to 3 units.

**BUS. 115 BUSINESS MATHEMATICS**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, ENGL 800 or 836 or 400, and MATH 111; Prerequisite(s): BUS. 110. Description:* This is an introductory course in business mathematics. Students perform calculations and analysis involving taxes, discounts, negotiable instruments, periodic payments, compensation methods, inventory pricing, depreciation, and present value. Transfer: CSU.

**BUS. 128 CORPORATE MEETING AND EVENT PLANNING**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* This course covers skills needed to plan, cost and manage corporate group meetings, conference and special events. The course includes: setting goals and objectives, setting meeting timelines, site selection, negotiating contracts, budgets and financial management, liability and risk management, developing a program that works, ordering food and beverage, selecting speakers and audio-visual needs. Transfer: CSU.

**BUS. 132 STOCK AND BOND INVESTING**

*Units (Grade Option) 2; Class Hours: Minimum of 32 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* This course is an introduction to financial investing. Topics covered include goal setting, risk evaluation, asset allocation, the basics of investing in the stock and bond markets (both domestic and foreign), mutual funds, money managers, retirement plans, and how taxes impact investment decisions. Transfer: CSU.

**BUS. 138 MORTGAGE LENDING**

*Units (Grade Option) 2; Class Hours: Minimum of 32 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Overview of procedures and requirements used by financial institutions for mortgage lending. Topics covered include single-family home ownership, lending guidelines, deeds and titles, loan insurance, and refinancing. Transfer: CSU.

**BUS. 149 INTRODUCTION TO BUSINESS TRAVEL MANAGEMENT**

*Units: 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* This course is an overview of business travel services. Topics include business travel behaviors, various travel products including domestic and international suppliers, business travel budgets, internal and external sales distribution channels, business and economics, and the political implications of dealing with vendors. Transfer: CSU.

**BUS. 150 SMALL BUSINESS MANAGEMENT**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 100 or previous business experience. Description:* Introduces the methods used for starting and managing a small business. Analysis and comparison of opportunities and hazards of operating a small business. Transfer: CSU.

**BUS. 170 SALESMANSHIP FUNDAMENTALS**

*Telecourse: Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* The role of advertising in our economic life, with emphasis on advertising methods and media. Transfer: CSU.

**BUS. 180 MARKETING**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Sales and marketing principles used by modern business, including evaluation and methodologies for implementation of these principles for promoting the sales of consumer goods and services. Strategies of sales and marketing procedures used to conduct multi-phased sales and marketing campaigns for large and small business are covered also. Transfer: CSU.

**BUS. 184 MERCHANDISING**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Overview of the structure of the retail industry. Other topics include fashion versus basic goods, nationally distributed products, products for exclusive distribution, and the wholesale marketplace. Transfer: CSU.

**BUS. 186 RETAIL MANAGEMENT**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Introduction to retail management including inventory performance and financial aspects of retail, planning, purchasing, and pricing retail inventories, reports used to evaluate sales and inventory performance, and fundamental store designs. Transfer: CSU.

**BUS. 201 BUSINESS LAW (CAN BUS 12)**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Introduction to the laws applicable to business institutions and their operation. Topics also covered are sources of law, agencies for enforcement and court procedures, California law applicable to contracts and agency relationships, crimes, and torts. Transfer: CSU, UC.

**BUS. 211 ETHICS IN BUSINESS**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Ethics in the business world including the social contract, the relationship between ethics and laws, corporations and social responsibilities, bribery, environmental issues, and cultural differences in business practice. Transfer: CSU.

**BUS. 395 GETTING STARTED IN BUSINESS**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hour/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Designed to assist in starting a new business or growing a current business faster, in evaluating a business idea, and in organizing a business by studying important business principles developed by international business consultants. Transfer: CSU.

**BUS. 396 DEVELOPING A BUSINESS PLAN**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hour/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Learn how to design, develop, and implement the most important tool for a successful business--the business plan. Transfer: CSU.

**BUS. 397 DEVELOPING TOOLS TO CREATE A MARKETING PLAN**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hour/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Learn about marketing and advertising tools, including the Internet, and get ready to start your own business; talk to entrepreneurs, identify your target customers and position your company for success. Transfer: CSU.

**BUS. 398 SMALL BUSINESS RESOURCE LAB**

*Units (Credit/No Credit) 0.5-3.0; Class Hours: Minimum of 24-96 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Learn to start and operate a small business successfully from consulting sessions located at the Small Business Resource Center. Work at your own pace to evaluate your business idea, develop a business plan, marketing plan, financial plan, and much more. Open entry/Open Exit. May be repeated for credit up to 3 units. Transfer: CSU.

**BUS. 399 SMALL BUSINESS DEVELOPMENT CENTER TRAINING**

*Units (Grade Option) 1-5; Class Hours: Minimum of 16 lecture hour/semester per unit; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Describes the skills needed to become successful business owners. The following topics are covered also: 1) laws governing small businesses, 2) managing a business, 3) regulations and permits for a business, 4) selecting business site(s), and 5) using Quicken software to manage the finances of a business. May be repeated for credit up to 5 units.

**BUS. 415 BEGINNING COMPUTER KEYBOARDING**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* This course is an overview of correct keyboarding techniques using the alphabetic and numeric keys on the computer. Computer software is used to aid in developing a minimum speed of 25 words per minute. Instruction for using the 10-key calculator and/or the 10-key pad of the computer is included also. Transfer: CSU.

**BUS. 416 PROCEDURES FOR WORKING IN AN OFFICE**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 474. Description:* This course covers skills needed to work in an office. Topics include the automated/electronic office, time and stress management, office ethics and environment, career planning, records management, telephone techniques, and composing and transcribing letters. Spring semester only. Transfer: CSU.

**BUS. 417 SKILL BUILDING**

*Units (Credit/No Credit) 1.5-3; Class Hours: Minimum of 24 lecture/32 by arrangement lab hours/semester per 1.5 units; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 415. Description:* This course provides individualized, self-paced instruction to improve accuracy and develop keyboarding (typing) speed. Diagnostic tests are given to assess skill levels. May be repeated for credit up to 3 units. Transfer: CSU.

**BUS. 419 ON-SITE MANAGEMENT**

*Units: 1; Class Hours: Minimum of 16 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Learn how to effectively manage the multiple priorities and needs of a group during a corporate meeting or incentive award program. Students learn how to set up registration, how to manage last-minute budget busting costs, skills for effective time management, crisis management, problem solving, and managing difficult attendees. Transfer: CSU.

**BUS. 422 HELP DESK**

*Unit 1.5; Class Hours: Minimum of 24 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 430. Description:* Introduces students to the functions of Help Desk in the technical support setting. The Help Desk roles and responsibilities, processes and procedures, tools and technologies, and performance measures are explored in detail. In addition the course emphasizes the combination of technical, business, and personal skills important to Help Desk personnel. Transfer: CSU.

**BUS. 425 BASIC DOS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 431. Description:* Introductory course covering the use of DOS (Disk Operating System) for the computer. Internal and external DOS commands are covered also. Transfer: CSU.

**BUS. 426 ADVANCED DOS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 425. Description:* Intermediate and advanced commands of DOS including batch files, pipes and filters, menus, and hard disk management. Editing and other methods of creating batch files, organizing a hard disk, tailoring your system, and creating menus are covered also. Transfer: CSU.

**BUS. 430 COMPUTER APPLICATIONS, PART I**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Introduction to the use of PCs including the basic features of Windows, word processing, and presentation graphics using Microsoft Office. BUS. 415 is recommended. Transfer: CSU, UC\*.

**BUS. 431 COMPUTER APPLICATIONS, PART II**

*Units (Grade Option) 1.5; Class Hours: 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Students learn the basic features of spreadsheets, database applications, and methods of integration using Microsoft Office. BUS. 430 is recommended. Transfer: CSU, UC\*.

**BUS. 435 SPREADSHEETS**

*Units (Grade Option) 1-3; Class Hours: Minimum of 16-48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Students plan and build worksheets using formulas and functions to solve business problems. The course covers charting, using multiple worksheets, solver, data tables, using and analyzing list data, using What-If Analysis, Pivot Tables, scenario management and macros, and managing workbooks. Integration with other Windows applications included. Open entry/Open Exit. May be repeated for credit up to 3 units. Transfer: CSU.

**BUS. 436 DATABASE MANAGEMENT**

*Units (Grade Option) 1-3; Class Hours: Minimum of 16-48 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* The use of Microsoft Access to build databases, to establish data entry screens, and to produce business reports. Other topics include relational databases, macros, file operations, and database management. Open entry/Open Exit. May be repeated for credit up to 3 units. Transfer: CSU.

**BUS. 438 DESKTOP PUBLISHING: USING PAGEMAKER**

*Units (Grade Option) 1-3; Class Hours: Minimum of 16-48 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 430 and 431 or equivalent; and keyboard 40 wpm. Description:* This course is an overview of desktop publishing as used in offices. Students will use a high-end desktop publishing program--PageMaker--to create flyers, bulletins, business cards, etc. May be repeated for credit up to 3 units. Transfer: CSU.

**BUS. 439 MANAGING BUSINESS DOCUMENTS**

*Units 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 415. Description:* In this course, students learn to create, format, and manage professional-looking business documents using a word processing program. Business documents include business letters, reports, tables, memorandums and electronic mail. Transfer: CSU.

**BUS. 440 MACINTOSH APPLICATIONS, PART I**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Introduces new Macintosh users to the operating system and its basic features such as navigating the Dock, the Finder toolbar, and the folder structure. In addition, the course covers word processing, drawing and painting and the presentation modules. Transfer: CSU.

**BUS. 441 MACINTOSH APPLICATIONS, PART II**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Introduces new Macintosh users to the database and spreadsheets modules. In addition, the course covers templates, clippings and assistants as well as using the internet, preferences, customization and macros. Transfer: CSU.

**BUS. 446 INTRODUCTION TO LOCAL AREA NETWORKS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 426. Description:* Introduction to the theory and vocabulary for Local Area Network technology including the major network components and their functions related to Local Area Network. Other topics include the benefits and pitfalls of using a LAN, data communication concepts, topologies, and transmission media. Transfer: CSU.

**BUS. 447 OVERVIEW OF ELECTRONIC COMPONENTS AND SAFETY ISSUES**

*Units: 1.5; Class Hours: Minimum of 24 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Students are introduced to general workmanship standards, workplace safety, and hazard awareness working with personal computers. An overview of the electronic component functionality, overview of the Printed Circuit Board (PCB) technology evolution, Electrostatic Discharge (ESD) on computer hardware is included. This is an introductory-level course based on the component evolution from Through-hole (TH) to Surface Mount (SM) Technologies, and mixed technology assemblies. Transfer: CSU.

**BUS. 448 USING MICROSOFT WINDOWS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Students learn the Windows operating system features, work with programs and file management. The course includes how to manage files and folders, maintain the computer, manage hardware, and customize Windows. May be repeated once for credit. Transfer: CSU.

**BUS. 450 PERSONAL COMPUTER MAINTENANCE AND SYSTEM UPGRADES**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 415. Description:* Introduction to problem-solving skills for computers. Topics covered include a review of hardware, software error codes, replacement of boards, optimization of a hard disk, caring for floppy disk drives, hardware versus software problems, troubleshooting, and analysis of problems associated with printers and software. Transfer: CSU.

**BUS. 451 ADVANCED PERSONAL COMPUTER MAINTENANCE AND SYSTEM UPGRADES**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 450. Description:* Continuation of BUS. 450. Students learn the use of advanced software utilities and testing equipment to perform software/hardware analysis and troubleshooting. Hands-on installation of operating systems, installation of software, and performing system backups is performed. Transfer: CSU.

**BUS. 453 IT TROUBLESHOOTING RESOURCES**

*Units: 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 450 and 480. Description:* The course introduces techniques and resources used to identify, analyze and rectify various hardware, software, connection, and user problems. Using text references, computer, and Internet resources, students learn to apply standard problem-solving procedures relating to personal computer malfunctions. Transfer: CSU.

**BUS. 457 PRESENTATION SOFTWARE: POWERPOINT**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 430. Description:* Intermediate features of PowerPoint including importing and exporting data, drawing, linking and embedding objects, using color, and creating and running multiple slide shows. Transfer: CSU.

**BUS. 459 MICROSOFT PUBLISHER**

*Units (Grade Option) 2; Class Hours: Minimum of 32 lecture/16 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 430. Description:* This course is an overview of MS Publisher. Application of desktop publishing concepts and design theory are demonstrated through paper-based and electronic (Web design) documents commonly used by small businesses and individuals. Transfer: CSU.

**BUS. 464 ADVANCED WINDOWS OPERATING SYSTEM**

*Units 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 448 or equivalent. Description:* This course covers all utilities and maintenance utilities that are included with Windows. Also included are installing, upgrading, reinstallation, and troubleshooting Windows. Transfer: CSU.

**BUS. 466 USING MICROSOFT NT**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 446. Description:* Microsoft NT system administration, including installation of a NT server, the

creation of users and groups, trust relationships, and server environment optimization. Other topics include planning and implementing NT server, managing NT printer services, configuring remote access, and installing network cards. Transfer: CSU.

**BUS. 470 ADVANCED SPREADSHEETS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 435. Description:* Overview of advanced business applications using software for creating spreadsheets with macros, graphs, databases, and database queries. Other topics include integrating spreadsheets into text, creating database reports, and integrating and printing graphs and databases as part of reports. Transfer: CSU.

**BUS. 472 INTRODUCTION TO WORD FOR WINDOWS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* This course covers the basic features of Word for Windows. The topics include creating, editing, printing, and formatting. Transfer: CSU.

**BUS. 474 INTERMEDIATE WORD FOR WINDOWS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/32 lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 472. Description:* Intermediate features of Word for Windows including labels, merging, macros, sorting, tables, columns, and desktop publishing features. Transfer: CSU.

**BUS. 475 USING OUTLOOK**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 430. Description:* Students learn Outlook, a personal information management program that helps prepare a wide range of organizational tasks within an office environment. Includes sending and receiving messages and managing the Inbox, scheduling appointments and meetings using the Calendar, creating and managing tasks and journal entries using Outlook with other Office applications and using Outlook with the Internet. Transfer: CSU.

**BUS. 478 INTEGRATING MICROSOFT OFFICE**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 430 and 431. Description:* In this course students learn how to integrate and share data among Microsoft Word documents, Excel spreadsheets, Access databases, and PowerPoint presentations. Other topics include object linking and embedding, multitasking, task listing, and creating compound documents. Transfer: CSU.

**BUS. 479 INTERNET FOR TECHNICIANS**

*Units: 1; Class Hours: Minimum of 16 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 450 and 480. Description:* Designed for students with knowledge of PC hardware, software, and local area networks. Students learn how to install and configure TCP/IP services, dial-up and dedicated Internet connections, and Internet mail services on a PC. In addition, various techniques used to troubleshoot connectivity configuration issues are discussed. Transfer: CSU.

**BUS. 480 USING THE INTERNET, PART I**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 448.*  
**Description:** Students learn how the Internet works, Internet connection options available, utilization of Internet addresses, mastery of browsers available, and basic e-mail features. Transfer: CSU.

**BUS. 482 USING THE INTERNET, PART II**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 480.*  
**Description:** Continuation of BUS. 480. Students continue to learn how to assess and evaluate search tools, demonstrate competency in the use of Boolean operators and other advanced techniques. Characteristics of the hardware and software options are covered. Transfer: CSU.

**BUS. 483 CREATING WEB PAGES: INTRODUCTION TO HTML**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 480.*  
**Description:** Creating Web pages using HTML, hypertext markup language, structure, protocols, testing, editors, converters, HTML tags, colors, hex codes, style sheets, and printing are covered. This course teaches the user to create Web pages and develop a Web site. Transfer: CSU.

**BUS. 484 CREATING WEB PAGES: INTERMEDIATE HTML**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 483 or equivalent.*  
**Description:** Learn to create extensive Web pages using intermediate HTML code, hypertext markup language. Tables are explored in depth including merging columns and rows, parameters, alignment of text and images, color, captions, headers; forms and frames, and exploration of design layout is covered also. Transfer: CSU.

**BUS. 488 DESIGNING WEB PAGES USING FRONTPAGE**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 430 and 480.*  
**Description:** Designed for both experienced and beginning Web site developers using a simple yet powerful tool for designing and building great looking, easy-to-navigate World Wide Web sites. The students create Web pages, learn to manage Web sites, and understand how to use HTML codes. This course prepares students for the MOUS certification exam for expert level. Transfer: CSU.

**BUS. 492 NETWORKING ESSENTIALS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None.*  
**Description:** Introduces the basics of Local Area Networks including terminology, network components and functions, and the specific relationships to Microsoft Windows NT. This course prepares the students for the Microsoft Certification examination. Transfer: CSU.

**BUS. 493 INTERNETWORKING WITH TCP/IP ON MICROSOFT WITH MICROSOFT WINDOWS 4.0**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ*

*802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 492.*  
**Description:** Students learn the capabilities of TCP/IP using Windows NT including installation and utilities such as PING, TELNET, NSLOOKUP, ARP, TRACERT, etc. Additional topics include addressing, subnetting, bridging, routing, domains, OSI Model, and thorough coverage of TCP/IP architecture and implementation. This course prepares students for the Microsoft Certification examination. Transfer: CSU.

**BUS. 494 IMPLEMENTING AND SUPPORTING MICROSOFT WINDOWS NT WORKSTATION 4.0**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 492.*  
**Description:** Students learn Microsoft Windows NT Workstation 4.0 operating system. The course covers basic Workstation concepts including how to install the system, administer users and groups, configure file systems and security, configure local and network printing, and network Windows NT Workstation. The course helps students prepare for the Microsoft certification exam. Transfer: CSU.

**BUS. 496 WINDOWS NT SERVER 4 IN THE ENTERPRISE**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 494.*  
**Description:** Techniques of planning, executing, and troubleshooting in the Enterprise environment. Additional topics include: overcoming the Enterprise level challenges such as administration, security, Remote Access; managing a multitude of different clients and servers; and integration of different operating systems with Windows NT. This course prepares students for the Microsoft certification exam. Transfer: CSU.

**BUS. 497 WINDOWS 2000 PROFESSIONAL**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 448 and 492.*  
**Description:** Install, configure and administer Windows 2000 Professional in workgroup and Domain networks. Topics include installation methods; protocol configuration; user and group management; file, share, and logon security; printing; hardware and software installations; troubleshooting and related Windows 2000 topics. Preparation for Microsoft 70-210 examination. Transfer: CSU.

**BUS. 498 WINDOWS 2000 SERVER**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): BUS. 497.*  
**Description:** Implement, configure and support a Windows 2000 server as domain controller in a Microsoft enterprise network environment. Topics include network protocols; domain user and group management; share, NTFS and logon security; introduction to Active Directory Service; printing; server performance optimization and troubleshooting. Prepares student for the Microsoft certification. Transfer: CSU.

## CAREER AND PERSONAL DEVELOPMENT

**CRER 112 CAREER ADVANTAGE**

Telecourse: *Units (Credit/No Credit) 2; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None.*  
**Description:** For those who are undecided about career goals or

are changing their career direction. Stresses the significance of clearly defined values and the development of strategies and goals for life work. Transfer: CSU.

### **CRER 137 LIFE AND CAREER PLANNING**

*Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Personal and career inventories are evaluated. Career options are researched and job search techniques are developed. Course stresses the significance of clearly defined values and the development of strategies and goals for life. Transfer: CSU.

### **CRER 140 PEER COUNSELING**

*Units (Grade Option) 1-3; Class Hours: Minimum of 16-48 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* An orientation and training course to develop personal counseling skills which emphasize the experiential process of interpersonal communication as well as the theoretical explanation of the counseling process and behavior. Selected topics involving interpersonal relationships give students an opportunity to explore and communicate feelings while learning principles of personal counseling. May be repeated for credit up to 3 units. Transfer: CSU.

### **CRER 300 INTRODUCTION TO SCHOLARSHIPS**

*Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* Introduces students to scholarship and financial aid opportunities at the local, state, and national levels. Learn research techniques and utilize publications, software, internet sites, and community resources. Emphasis on development of a personal organizational system to manage the process of the scholarship search. Identify scholarships that meet personal criteria. Personal statements, interview techniques, resumes, organization and time management skills are also covered. Transfer: CSU.

### **CRER 401 COLLEGE SUCCESS**

*Units (Grade Option) 0.5-1; Class Hours: Minimum of 8-16 lecture hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* In-depth information regarding college policies, procedures, educational requirements and college programs/support services. This course also assists students in assessing time management, setting goals and decision-making skills. May be repeated for credit up to 1 unit. Transfer: CSU.

### **CRER 410 COLLEGE AND CAREER AWARENESS**

*Units (Grade Option) 2; Class Hours: Minimum of 32 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* Although the course is intended for students in special programs and emphasizes their special needs, all students are welcome to participate. The course deals more thoroughly with topics from CRER 401. Units do not apply toward AA/AS degree.

### **CRER 430 CAREER ASSESSMENT**

*Units (Credit/No Credit) 0.5; Class Hours: Minimum of 24 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None; Description:* Designed to help individuals define career alternatives. Vocational interest, skills, and values instruments are given and results interpreted. A minimum of 24 hours of "by arrangement" testing, research, and counseling are required. Transfer: CSU.

### **CRER 650 SPECIAL INTEREST DISCUSSION GROUPS**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* Any group of students with a common interest may meet under the leadership of a counselor to explore and evaluate personal values, goals, and expectations as they relate to this social and cultural environment. Units do not apply toward AA/AS degree.

### **CRER 815 ADAPTING TO THE STUDENT ROLE**

*Units (Grade Option) 1; Class Hours: Minimum of 16 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* This course is designed to assist students with becoming aware of and adapting to the role of a community college student. Developing skills associated with achieving success as a community college student is emphasized. This course is designed to meet the needs of students in the Stepping Stones program. Units do not apply toward AA/AS degree.

### **CRER 840 INTRODUCTION TO WORKABILITY III**

*Units (Grade Option) 0.5; Class Hours: Minimum of 8 lecture hours/semester; Basic Skills Level: Open Curriculum; Prerequisite(s): None. Description:* Students are introduced to the range of services offered by the WorkAbility III program. Information is presented about vocational and disability issues common to the WorkAbility III students. Students participate in discussion groups, which provide them with the opportunity to give and receive support as they begin the program. Units do not apply toward AA/AS degree.

### **CRER 841 VOCATIONAL EVALUATION AND ASSESSMENT**

*Units (Grade Option) 1; Class Hours: Minimum of 48 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* This course offers career and interest testing to assist the student with disabilities to identify values, skills and interests in relation to career and job choices. Functional abilities, challenges, accommodations and transferable skills are also explored to facilitate success in reaching vocational objectives. Units do not apply toward AA/AS degree.

### **CRER 845 STEPS TO EMPLOYMENT**

*Units (Grade Option) 0.5-2; Class Hours: Minimum of 24-96 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* This course introduces the student to the steps in obtaining employment. Students learn how to develop a resume and cover letter, improve interview skills and utilize the internet in job searches. Other areas explored include time management, assertiveness skills and disability considerations. May be repeated for credit up to 2 units. Open Entry/Open Exit. Units do not apply toward AA/AS degree.

### **CRER 846 JOB RETENTION STRATEGIES**

*Units (Grade Option) 0.5-2; Class Hours: Minimum of 24-96 by arrangement lab hours/semester; Recommended: Eligibility for READ 802 or 836, and ENGL 800 or 836 or 400; Prerequisite(s): None. Description:* This course provides support for the student in maintaining employment. Students learn time management skills and responsible behavior on and off the job, and how to communicate effectively and meet the challenges of interpersonal relationships in the workplace. Stress reduction and conflict resolution techniques are also offered. May be repeated for credit up to 2 units. Open Entry/Open Exit. Units do not apply toward AA/AS degree.