

BUS 102 Business Mathematics**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU

Basic concepts of business mathematics with emphasis on problem solving. Covers arithmetic fundamentals, business applications, percentages, merchandising, accounting, and measuring business performance and success. This course has the option of a letter grade or pass/no pass. **ADVISORY:** Eligible for Mathematics 402 and English 260.

BUS 190 Occupational Work Experience / General Business**Units:** 1.0 TO 4.0 **Hours:** 5.0 TO 20.0 Laboratory**Transferable:** CSU

Occupational work experience for students who have a job related to their major. A training plan is developed cooperatively between the employer, college and student. (P/NP grading) 75 hours per semester paid work = 1 unit. 60 hours non-paid (volunteer) work per semester = 1 unit. May be taken for a maximum total of 16 units. Minimum 2.00 GPA. **REQUIRED:** Declared vocational major.

BUSINESS OFFICE TECHNOLOGY**BOT 100 Business Correspondence****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU; GAV-GE:F

Using word processing software, students will plan, compose, and revise a variety of business documents including letters, emails, reports, and memos. Messages will be analyzed to develop correspondence that is appropriate to the target audience and that is effective and professional. Using presentation graphics software, students will prepare professional level oral reports for a variety of business situations. Also listed as BUS 100. **ADVISORY:** Eligible for ENGL 250 and ENGL 260.

BOT 102 Business Mathematics**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU

Basic concepts of business mathematics with emphasis on problem solving. Covers arithmetic fundamentals, business applications, percentages, merchandising, accounting, and measuring business performance and success. This course has the option of a letter grade or pass/no pass. **ADVISORY:** Eligible for Mathematics 402 and English 260.

BOT 112 Business Computations with Machines**Units:** .5 **Hours:** 1.5 Laboratory**Transferable:** CSU

Self-paced course in the operation of the electronic printing calculator. This course provides theory and practice in business applications with emphasis on mathematical problem solving. This course has the option of a letter grade or pass/no pass. **ADVISORY:** Eligible for Mathematics 402.

BOT 180 Medical Terminology for the Office**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU

This course introduces fundamentals of medical word building used in the health profession (prefixes, word roots, suffixes and abbreviations) as well as review of body systems, with emphasis on analysis, definition, spelling and pronunciation. This course had the option of a letter grade or pass/no pass. **ADVISORY:** Eligible for English 250 and English 260.

BOT 181 Medical Billing**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU

This course is an introduction to computerized billing procedures for the medical front office. Students will learn the patient billing features of the software and complete a capstone simulation project. This course has the option of a letter grade or pass/no pass. **ADVISORY:** Eligible for English 250. Some computer experience.

BOT 182 Medical Office Procedures**Units:** 3.0 **Hours:** 2.0 Lecture and 3.0 Laboratory**Transferable:** CSU

This specialized course includes medical office procedures, patient record management, coding/billing for private/government health insurance programs, and professional ethics. This course has the option of a letter grade or pass/no pass. **PREREQUISITE:** BOT 180 and CSIS 126 with credit or a grade of C or better or experience using Microsoft Word. **ADVISORY:** Eligible for English 250 and Mathematics 402.

BOT 183 Medical Coding**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU

This course will introduce the student to the theory and procedure of coding for medical diagnoses, an increasingly essential and specialized healthcare communication system. The course is not a certification course. CPT coding is covered, with an overview of both ICD-9 and ICD-10 coding. This course has the option of a letter grade or pass/no pass. **ADVISORY:** BOT 180.

BOT 190 Occupational Work Experience / Business Office Technology**Units:** 1.0 TO 4.0 **Hours:** 5.0 TO 20.0 Laboratory**Transferable:** CSU

Occupational work experience for students who have a job related to their major. A training plan is developed cooperatively between the employer, college, and student. (P/NP grading) 75 hours per semester paid work = 1 unit. 60 hours non-paid (volunteer) work per semester = 1 unit. May be taken for a maximum total of 16 units. Minimum 2.00 GPA. **REQUIRED:** Declared vocational major.

BOT 191A Workplace Skills**Units:** 1.0 **Hours:** 1.0 Lecture**Transferable:** CSU

Workplace Skills teaches skills vital to workplace success. The topic for 191A is Interpersonal Communication. Need not be taken in sequence. This is a pass/no pass course.

BOT 191B Workplace Skills**Units:** 1.0 **Hours:** 1.0 Lecture**Transferable:** CSU

Workplace Skills teaches skills vital to workplace success. The topic for 191B is Team Building. Need not be taken in sequence. This is a pass/no pass course.

BOT 191C Workplace Skills**Units:** 1.0 **Hours:** 1.0 Lecture**Transferable:** CSU

Workplace Skills teaches skills vital to workplace success. The topic for 191C is Problem-Solving. Need not be taken in sequence. This is a pass/no pass course.

CARPENTER APPRENTICE**CARP 200 Introduction to Apprenticeship****Units:** 1.5 **Hours:** 22.0 Lecture and 14.0 Laboratory

Introduction to Apprenticeship is designed to make the apprentice familiar with the tools and skills to be successful in construction. This includes hazard awareness, safe use of selected power tools, review of mathematics used in construction and understanding the Union and apprentice's role and responsibilities.

CARP 201 Worker Safety and Tool Skills**Units:** 1.5 **Hours:** 18.0 Lecture and 18.0 Laboratory

This course will examine possible hazards of the construction site and the methods used to protect the worker from those hazards. Students will become familiar with California workplace safety regulations designed to protect the worker from the hazards of employment, and students will gain the experience necessary to safely use a selected group of power tools.

CARP 202 The Apprentice Carpenter and the Trade**Units:** 2.0 **Hours:** 36.0 Lecture

This course covers the history of carpenter apprenticeship and the trade. Topics include wages and benefits, worker's compensation, job placement, collective bargaining, working conditions, and labor-management relations as they pertain to unions, contractors, and cooperatives.

CARP 203 Construction Math and Introduction to Working Drawings**Units:** 2.0 **Hours:** 30.0 Lecture and 6.0 Laboratory

This course covers mathematics applications to the construction trade with specific focus on mathematical processes in carpentry. Topics include an introduction to elements of working drawings used in the construction process.

CARP 204 Foundations and Floors**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course covers layout, forming, and framing of foundations, joist and sub-flooring construction.

CARP 205 Blueprint Reading-Basic / Fringe Benefits Presentation**Units:** 2.5 **Hours:** 30.0 Lecture and 6.0 Laboratory

This course is an introduction to residential blueprints. Topics include conventions, lines, symbols, measurements, and specifications used for residential construction.

CARP 206 Structural Framing**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course covers basic framing systems and layout of walls, ceilings and stairwells.

CARP 207 Concrete Formwork**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course covers planning and building of form work, construction and erection of various concrete forms, and construction materials and methods.

CARP 208 Exterior Finish**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course covers exterior design, materials, and methods of application and finishes in building construction. Students will complete the tasks required in planning and installing exterior finish and trim materials in a safe and efficient manner.

CARP 209 Blueprint Reading - Advanced**Units:** 2.0 **Hours:** 30.0 Lecture and 6.0 Laboratory

This course is an introduction to commercial and industrial blueprints. Topics include conventions, lines, symbols, measurements, and specifications used for commercial and industrial construction. Complete construction material take-off calculations commonly used on the job.

CARP 210 Concrete- Precast and Prestressed**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course covers concrete components and the effect of component proportions on the workability and strength of concrete. The type of cement and admixtures to use in a given situation are discussed. Detail and build tilt-up panel forms. Construct a bridge deck and the forms for a box beam girder.

CARP 211 Interior Finish**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course covers interior designs, materials, and methods of application in building construction. Students will complete the tasks required in planning and installing interior materials in a safe and efficient manner.

CARP 212 Layout Instruments**Units:** 1.0 **Hours:** 24.0 Lecture and 12.0 Laboratory

This course covers use of leveling devices. It includes reading and interpreting an engineer's rod, horizontal and vertical setting circles, and vernier scale. Additional topics include construction layout of horizontal and vertical angles.

CARP 213 Engineered Structural Systems**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course covers the design of heavy timber construction, lamination, dams, bridges and trusses. Construct, in proper sequence, a panel roof system having hinge connectors, steel caps, beam seats, and sawn lumber roof members. Construct a truss roof system. Tie the basic knots used in rigging. Direct a crane using university recognized hand signals.

CARP 214 Commercial Steel Framing**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course is a comprehensive study of materials, work processes and the proper use of tools necessary to install layout and material application for metal framing, drywall, suspended ceilings, metal frames and doors, door hardware, and access floors.

CARP 215 Stair Building**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course covers types, designs, nomenclature and Uniform Building Codes requirements for building stairs. Topics include mathematical calculations and layout procedures, constructing stairs, landings, newels and handrails.

CARP 216 Roof Framing**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course covers roof framing, layout and construction. Topics include planning and building several styles of roofs using accepted terminology, technical information, construction materials and methods, and meeting accepted industry standards.

CARP 217 Introduction to Welding and Cutting**Units:** 1.0 **Hours:** 6.0 Lecture and 30.0 Laboratory

This course covers welding methods, brazing, flame cutting, and shielded arc welding. Topics include thermo forming and thermo setting plastics applicable to the building construction industry. Perform basic welding tasks in a safe manner.

CARP 218 Commercial Concrete**Units:** 1.0 **Hours:** 11.0 Lecture and 25.0 Laboratory

This course is designed to make apprentices familiar with the concepts and practices of commercial concrete construction. The apprentice will be knowledgeable about the layout and construction of bolt patterns, concrete columns and gang forms. In addition, the student will be familiar with the types and methods used to safely build, shore and place column caps and concrete decks.

CARP 219 Rigging**Units:** 1.0 **Hours:** 16.0 Lecture and 20.0 Laboratory

This course familiarizes apprentices with the equipment and the procedures to safely rig and hoist various loads on the jobsite.

CARP 220 Commercial Door Hardware**Units:** 1.0 **Hours:** 12.0 Lecture and 24.0 Laboratory

This course teaches apprentices the basic skill necessary to successfully install commercial door hardware.

CARP 290 Occupational Work Experience / Carpenter**Units:** 1.0 TO 4.0 **Hours:** 3.3 TO 16.7 Laboratory

Occupational work experience for students who have a job related to their major. A training plan is developed cooperatively between the employer, college and student. (P/NP grading) 75 hours per semester paid work = 1 unit. 60 hours non-paid (volunteer) work per semester = 1 unit. Student repetition is allowed per title 5 section 55253. Minimum 2.00 GPA. REQUIRED: Declared vocational major. PREREQUISITE: CARP 200.