

## BIOTECHNOLOGY

### BIOT 103 Biotechnology Lab Skills and Instrumentation

**Units:** 4.0 **Hours:** 2.0 Lecture and 6.0 Laboratory

Introduction to biotechnology laboratory skills. Techniques will include DNA isolation, DNA fingerprinting, cloning, restriction mapping, and Southern blotting. Includes the use and care of instruments such as centrifuges, mechanical and micropipettes, and electronic balances. Will also include keeping of a notebook, report writing, and calculations. ADVISORY: Eligible for English 250. PREREQUISITE: Completion of BIO 1 with a grade of C or better; may be taken concurrently.

### BIOT 104 Seminar in Biotechnology

**Units:** 1.0 **Hours:** 1.0 Lecture

This course will survey careers in biotechnology and ethical issues in biotechnology.

## BUSINESS

### BUS 1 Fundamentals of Business

**Units:** 3.0 **Hours:** 3.0 Lecture

**Transferable:** GAV-GE:D2, GAV-GE:F

A survey in business providing a multidisciplinary examination of how culture, society, the economic system, the legal environment, international and political issues, financial institutions, and human behavior interact to affect a business organization's policy and practices within the U.S. and abroad. Demonstrate how these influences impact the primary areas of business including: organizational structure and design, leadership, human resources management, organized labor practices; marketing; organized communication; technology; entrepreneurship; legal, accounting, financial practices; the stock and securities markets; and therefore affect a business's ability to achieve its organizational goals. This course has the option of a letter grade or pass/no pass. Previously listed as GBUS 1. (C-ID: BUS 110) ADVISORY: Eligible for English 250 and English 260.

### BUS 11 Statistics for Business and Economics

**Units:** 4.0 **Hours:** 4.0 Lecture

**Transferable:** CSU-GE:B4, IGETC:2A, GAV-GE:B4

The use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; statistical analysis including the interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social science, psychology, life science, health science, and education. Additional and more extensive case studies from business and economics, emphasizing statistical results that provide guidance for business decisions or suggest solutions to contemporary business and economic problems; use of larger data sets analyzed with computer software programs. PREREQUISITE: Math 233, or Math 233A and Math 233B, or Math 235, or Math 240, or Math 242 with a grade of "C" or better.

### BUS 14 Personal Finance

**Units:** 3.0 **Hours:** 3.0 Lecture

This course is designed to assist individuals to analyze their financial affairs for lifelong decision making. Elements and concepts of financial planning and decision making in the areas of budgeting, taxes, borrowing, money management, insurance, investments, retirement, and estate planning will be examined. This course is also listed as ECON 14. This course has the option of a letter grade or pass/no pass. ADVISORY: Math 400

### BUS 80 Business Law

**Units:** 3.0 **Hours:** 3.0 Lecture

Introduction to the law applicable to business institutions and their operations; social forces and their effect upon the development of law; sources of law, agencies for enforcement, and court procedure and administration agencies. Substantive law, that law which includes rights and duties, will include contracts, agency employment relationships, torts and crimes. This course has the option of a letter grade or pass/no pass. Previously listed as GBUS 80. (C-ID: BUS 125) ADVISORY: Eligible for English 250 and English 260.

### BUS 100 Business Correspondence

**Units:** 3.0 **Hours:** 3.0 Lecture

**Transferable:** 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 BOT 100. ADVISORY: Eligible for ENGL 250 and ENGL 260.

### BUS 102 Business Mathematics

**Units:** 3.0 **Hours:** 3.0 Lecture

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:** 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.

## BUSINESS OFFICE TECHNOLOGY

### BOT 100 Business Correspondence

**Units:** 3.0 **Hours:** 3.0 Lecture

**Transferable:** 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

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

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

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

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:** 3.0 Lecture

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.

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

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:** 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.

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

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

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

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.

**CHEMISTRY****CHEM 1A General Chemistry****Units:** 5.0 **Hours:** 4.0 Lecture and 3.0 Laboratory**Transferable:** CSU-GE:B1, CSU-GE:B3, IGETC:5A, IGETC:5C, GAV-GE:B1, GAV-GE:B3

This is the first semester of a year-long general chemistry course designed for science, engineering and pre-professional majors. Topics include properties of matter, atomic structure, the Periodic Table, stoichiometry, elements and compounds, bonding, molecular structure, chemical reactions, states of matter, as well as the properties of gases and solutions. (C-ID: CHEM 110) (C-ID: CHEM 120S: Chem 1A + Chem 1B) ADVISORY: Eligible for English 250 and English 260. PREREQUISITE: Chemistry 30A with a grade of 'C' or better, or high school chemistry with a grade of 'B' or better completed within the last five years, and Mathematics 233 with a grade of 'C' or better.

**CHEM 1B General Chemistry****Units:** 5.0 **Hours:** 4.0 Lecture and 3.0 Laboratory**Transferable:** CSU-GE:B1, CSU-GE:B3, IGETC:5A, IGETC:5C, GAV-GE:B1, GAV-GE:B3

This is the second semester of a year-long general chemistry course designed as a continuation of Chemistry 1A. Topics include solutions, thermodynamics, chemical kinetics, the equilibria of acids and bases, solubility systems, complex ions, electrochemistry, the chemistry of metals and nonmetals, as well as nuclear chemistry. (C-ID: CHEM 120S: Chem 1A + Chem 1B) PREREQUISITE: Chemistry 1A with a grade of C or better.

**CHEM 12A Organic Chemistry****Units:** 5.0 **Hours:** 3.0 Lecture and 6.0 Laboratory**Transferable:** CSU-GE:B1, CSU-GE:B3, IGETC:5A, IGETC:5C, GAV-GE:B1, GAV-GE:B3

This is the first semester of a year-long organic chemistry course designed for chemistry majors, pre-professional medical, biology, and science majors. Topics include nomenclature, stereochemistry, mechanisms, reactions and spectroscopic studies of organic compounds. Lecture and laboratory methods will focus on synthesis, isolation, purification, elucidation, and identification of organic structures, as well as instrumental methods and data interpretation. (C-ID: CHEM 150, CHEM 160S) PREREQUISITE: Chemistry 1B

**CHEM 12B Organic Chemistry****Units:** 5.0 **Hours:** 3.0 Lecture and 6.0 Laboratory**Transferable:** CSU-GE:B1, CSU-GE:B3, IGETC:5A, IGETC:5C, GAV-GE:B1, GAV-GE:B3

This is the second semester of a year-long organic chemistry course designed as a continuation of Chemistry 12A. Topics include nomenclature, stereochemistry, mechanism, reactions, and spectroscopic studies of the various organic functional groups. Lecture and laboratory methods will focus on synthesis, isolation, purification, elucidation and identification of organic structures as well as instrumental methods and data interpretation. (C-ID: CHEM 160S) PREREQUISITE: Chemistry 12A

**CHEM 30A Elementary Chemistry****Units:** 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory**Transferable:** CSU-GE:B1, CSU-GE:B3, IGETC:5A, IGETC:5C, GAV-GE:B1, GAV-GE:B3

This is a first semester college chemistry course designed for majors preparing to take Chemistry 1A, nursing and allied health students, as well as general education. The course will cover the principles of chemistry including properties of matter, energy, atomic theory, the Periodic Table, stoichiometry, elements and compounds, the properties of bonding, molecular structure, chemical reactions, states of matter, acidity, solutions and gases, as well as an introduction to organic chemistry. PREREQUISITE: Mathematics 430; eligible for English 250 and English 260.

All courses listed here are part of Gavilan College's approved curriculum. All courses are not offered every semester. Check the Class Schedule for current offerings.