# "B" Course Descriptions

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**BIOLOGY** 

**BROADCASTING** 

**BUSINESS** 



#### **COURSE DESCRIPTIONS**

#### 11 Aircraft Metal Assembly (4) CSU

Corequisite: Must be taken concurrently with Aviation Maintenance Technician 12.

This course offers a study of metal and non-metal repair procedures, including the materials and methods of fastening by welding, riveting, and other accepted techniques.

#### 12 Aircraft Metal Assembly Laboratory (2) CSU

Corequisite: Must be taken concurrently with Aviation Maintenance Technician 11.

Instruction and practice is offered in cutting, bending, forming, welding and fastening metal structures. Plastic enclosures, honeycomb and composites are evaluated. Structural repairs using various fastening and bonding techniques are emphasized.

#### 13 Hydraulic, Landing Gear, and Fuel Systems (4) CSU

Corequisite: Must be taken concurrently with Aviation Maintenance Technician 14.

Instruction is offered in the study of hydraulic landing gear and aircraft fuel systems. Emphasis is placed on component design, operation, relationships, and systems troubleshooting.

#### 14 Hydraulic, Landing Gear, and Fuel Systems Laboratory (2) CSU

Corequisite: Must be taken concurrently with Aviation Maintenance Technician 13.

Hydraulic, landing gear, and fuel systems are studied and operated, with components removed and reinstalled. Emphasis is placed on procedures and techniques, troubleshooting and diagnosis.

#### 15 Propeller and Powerplant Systems (4) CSU

Corequisite: Must be taken concurrently with Aviation Maintenance Technician 16.

Instruction is offered in propellers and powerplant lubrication, and cooling, induction, and exhaust systems. Fire protection, including fire detection and extinguishing systems, is included.

#### 16 Propeller and Powerplant Systems Laboratory (2) CSU

Corequisite: Must be taken concurrently with Aviation Maintenance Technician 15.

Instruction and practice is offered in identifying lubrication; troubleshooting engine lubricating systems; servicing and repairing propellers and control systems; troubleshooting and repairing powerplant cooling, induction and exhaust systems; and inspecting and servicing powerplant fire protection systems.

#### 17 Ignition and Fuel Metering Systems (4) CSU

Corequisite: Must be taken concurrently with Aviation Maintenance Technician 18.

Instruction is offered in the principles and practices of aircraft powerplant ignition systems and fuel metering systems.

#### 18 Ignition and Fuel Metering Systems Laboratory (2) CSU

Corequisite: Must be taken concurrently with Aviation Maintenance Technician 17.

Instruction and practice is offered in inspecting, checking, servicing, troubleshooting, and repairing aircraft ignition and fuel metering systems.

#### 19 Reciprocating Powerplant Overhaul (4) CSU

Prerequisites: Aviation Maintenance Technician 15 and 17. Corequisite: Must be taken concurrently with Aviation Maintenance Technician 20.

Instruction is offered in the maintenance, maintenance publications, and basic engine theory and overhaul procedures of reciprocating engines.

#### 20 Reciprocating Powerplant Overhaul Laboratory (2) CSU

Prerequisites: Aviation Maintenance Technician 16 and 18. Corequisite: Must be taken concurrently with Aviation Maintenance Technician 19.

Instruction and practice is offered in the use of maintenance publication records relative to overhaul procedures. Complete engine overhaul procedures, methods and practice are presented.

#### 21 Powerplant Troubleshooting and Testing (4) CSU

Prerequisite: Aviation Maintenance Technician 19.

Corequisite: Must be taken concurrently with Aviation Maintenance Technician 22.

Instruction is offered in powerplant inspection and troubleshooting procedures. Course includes turbine engine theory and operation.

#### 22 Powerplant Troubleshooting and Testing Laboratory (2) CSU

Prerequisite: Aviation Maintenance Technician 20. Corequisite: Must be taken concurrently with Aviation Maintenance Technician 21. Instruction and practice is offered in the installation, operation, and troubleshooting of aircraft powerplants.

#### 23 Inspection and Evaluation (4) CSU

Prerequisite: Aviation Maintenance Technician 1-22, or authorization for written exams. Corequisite: Must be taken concurrently with Aviation Maintenance Technician 24.

Instruction is offered in conducting 100-hour inspections. General airframe and powerplant subjects for the Airframe and/or Powerplant License are reviewed. Emphasis is placed on preparation for Federal Aviation Administration written examinations. *Note: Students must have a minimum 2.0 GPA in Aviation Maintenance Technology prior to enrolling in AMT 23 and AMT 24.* 

#### 24 Inspection and Evaluation Laboratory (2) CSU

Prerequisite: Aviation Maintenance Technician 1-22 or authorization for written exams. Corequisite: Must be taken concurrently with Aviation Maintenance Technician 23.

Instruction and practice is offered in conducting a 100-hour inspection on an airframe and powerplant, using the appropriate reference material and correct procedures to determine airworthiness of an airframe or powerplant. Students perform general practical airframe and powerplant projects. *Note: Students must have a minimum 2.0 GPA in Aviation Maintenance Technology prior to enrolling in AMT 23 and AMT 24.* 

## **BIOLOGY**

(Also see Anatomy, Environmental Science, Microbiology, and Physiology)

#### 3 Introduction to Biology (4)

This is a course in general biology designed to fulfill a laboratory science requirement for students not majoring in biology. Students must

be enrolled concurrently in a lecture and a lab section. The lecture portion of the course (Biology 3A) emphasizes the basic principles in biology and the fundamental characteristics of all living organisms. Lecture topics include the scientific method, cell structure and function, levels of organization of living organisms, heredity, and the genetic control of cellular processes, evolution, and ecology. The laboratory portion of the course (Biology 3B) emphasizes the diversity of living organisms. Laboratory topics include an introduction to the microscope, study of the cell, a survey of the microorganisms, plants, and animals that comprise the kingdoms of life, and the anatomic study of the earthworm, grasshopper, and fetal pig. Note: 3A and 3B must be taken concurrently. Biology 3A and 3B do not transfer separately. UC Transfer Credit Limit: No credit will be given for Biology 3A or 3B if taken after Biology 6 or 7.

3A Introduction to Biology - Lecture (3) UC:CSU 3B Introduction to Biology - Laboratory (1) UC:CSU

#### 6 General Biology I (5) UC:CSU

Prerequisite: Chemistry 101 with a grade of "C" or better. The principles of molecular biology, cell structure and function, genetics, evolution and organization at the tissue level in plants and animals are studied. Biology 6 and 7 satisfy requirements of lower division zoology and botany for biological science majors, pre-medical, pre-dental and pre-pharmacy majors. Note: Many four-year institutions recommend the completion of both Biology 6 and 7 as a core program. UC Transfer Credit Limit: No credit will be given for Biology 3A or 3B if taken after Biology 6 or 7.

#### 7 General Biology II (5) UC:CSU

(Biology 7 may be taken before Biology 6)

This course covers the principles of organ and organ system physiology in plants and animals, ecology and the course of evolution. A survey of the various plant and animal groups is included.

Note: Many four-year institutions recommend the completion of both Biology 6 and 7 as a core program.

UC Transfer Credit Limit: No credit will be given for Biology 3A or 3B if taken after Biology 6 or 7.

### 106 Anatomy of the Head and Neck for the Dental Hygienist (2)

(Same as Dental Hygiene 106)

Open to enrolled students in Dental Hygiene.

Prerequisite: Anatomy 1 with a grade of "C"or better. Corequisite: Dental Hygiene 100, 101A, and 101B

A detailed study of the anatomy of the human head, neck, face and jaw will be presented through lecture and study of anatomical models. Emphasis will be placed on differentiating normal and abnormal structure and function in the context of health and disease.

#### 156 Histology and Embryology of Oral Tissues (2)

(Same as Dental Hygiene 156)

Prerequisite: Open only to Dental Hygiene students who have completed all first semester Dental Hygiene courses attempted with a grade of "C" or better. (Second Semester)

Through lecture and demonstration, the histological structure of oral tissues is presented.

## **BROADCASTING**

#### 1 Fundamentals of Radio and Television Broadcasting (3) CSU

This is a survey course which introduces the student to the technical, historical and organizational aspects of the telecommunications industry. Areas explored may also include legal aspects, international systems, emerging media technologies, and the relationship and influence advertising and finance have upon the industry.

#### 7 Radio Announcing I (3) (RPT 1)

This course provides training for those interested in developing skills as announcers in radio or television, for commercials, news, sports, interviewers, on-air talent or talk show hosts.

#### 12 Broadcast Station Operation I (3) CSU

This is a laboratory course involving the operation of the campus radio station, WLAC. Duties will include on-air and internet radio operations.

#### 17 Industrial and Commercial Voice-over Techniques (3)

Corequisite: Music 265.

Development of the ability to narrate, dub and loop films, audio cassettes and video-taped materials for use in: industrial information units, the entertainment media, educational packages, and commercial advertising. Includes the development and use of some world dialects and an in-depth study of microphone techniques.

#### 25 Radio/TV/Film Writing (3) CSU

This course presents an analysis of the form and style of radio, television, and film script formats, and the preparation of scripts for radio, television, and film.

## **BUSINESS**

Also see: Accounting, Business, Computer Applications and Information Technology, Finance, Law, Management, Marketing, and Real Estate.

#### 1 Introduction to Business (3) UC:CSU

This course is a survey of the fundamental aspects of all phases of business including entrepreneurship alternatives, management/ leadership, marketing, financial management and institutions, investing through the securities market, and challenges facing global markets. Note: Students who are Business majors, or who are considering a change to this major, are advised to take this course as a foundation. It is a survey of the fundamental aspects of all phases of business.

### 5 Business Law I (3) UC:CSU (Same as Law I)

This course covers the essentials of the law of contracts: agency, employment, personal property, bailment, sales, and real property in their application to everyday problems pertaining to business and to the individual. Elementary safeguards regarding sales and sales contracts are covered.

UC Transfer Credit Limit: A maximum of one course from Law 1, Law 2, Business 5.

#### **COURSE DESCRIPTIONS**

#### 31 Business English (3) CSU

This course offers an intensive review of the techniques and mechanics of English: grammar, sentence structure, business vocabulary, capitalization, punctuation, various business letter styles, proofreadersí symbols, and website reference tools as specifically applied to the field of business. *Note: Required of all Business and CAOT majors*.

#### 32 Business Communications (3) CSU

This course covers the principles and techniques of effective business writing which includes the development of the ability to analyze, organize and compose various types of written and oral business communications. Emphasis is placed on writing clear, concise and persuasive letters, memos and reports, and the psychology of business letter composition and communications.

#### 38 Business Computations (3) CSU

This course provides a comprehensive study of business mathematics and reviews basic mathematics such as decimals, fractions, and percentages. It also covers the topics of bank services, payroll, the mathematics of buying and selling, interest and loans, taxes, cash and trade discounts, depreciation and other business computations. This course is intended for students interested in pursuing careers in business.

## **CHEMISTRY**

#### 51 Fundamentals of Chemistry I (5) UC:CSU

Recommended: One year of high school algebra, or Mathematics 115. This course is a descriptive course in inorganic and organic chemistry. Topics include the metric system of measurement; chemical symbols, formulas and nomenclature systems; chemical equations; physical properties including density, solubility and states of matter; chemical properties; acids, bases, buffers and pH; basic principles of equilibrium and an introduction to radioactivity. Organic topics focus on functional group identification including hydrocarbons, organic halides, alcohols, ketones, acids, esters, amines, carbohydrates, lipids and proteins. This course is designed for Nursing and other Allied Health majors, students in environmentally hazardous materials, elementary education or liberal arts who do not intend to take Chemistry 101.

UC Transfer Credit Limit: A maximum of one course from Chemistry 51 or 60. No credit for Chemistry 51 or 60 if taken after Chemistry 101.

## 60 Introduction to General Chemistry (5) UC:CSU

(Formerly Chemistry 10)

Prerequisite: One year of high school algebra, or Mathematics 115. This basic chemistry course presents elementary principles of general chemistry, including nomenclature and problem solving. Students whose previous chemistry background is inadequate for Chemistry 101 should take this course in preparation for Chemistry 101. Chemistry 60 is also recommended for students who have been away from high school chemistry for more than two years.

UC Transfer Credit Limit: A maximum of one course from Chemistry 51 or 60. No credit for Chemistry 51 or 60 if taken after Chemistry 101.

# 101 General Chemistry I (5) UC:CSU (Formerly Chemistry 1) Prerequisites: (1) High school chemistry or Chemistry 60 with a grade

of "C" or better; (2) A minimum of two years of high school mathematics or Mathematics 125 or equivalent.

This is a basic course emphasizing principles and theories. It includes discussions of chemical stoichiometry, atomic and molecular structure and the periodic table, gases, liquids, solids, solutions, oxidation reduction, acids and bases, and an introduction to chemical thermodynamics. The laboratory emphasizes basic laboratory skills, chemical principles, and quantitative relationships.

UC Transfer Credit Limit: No credit for Chemistry 51 or 60 if taken after Chemistry 101.

## **102 General Chemistry II (5) UC:CSU** (Formerly Chemistry 2) Prerequisite: Chemistry 101 with a grade of "C" or better.

This course is a continuation of Chemistry 101, with an introduction to chemical kinetics, chemical equilibrium with emphasis on aqueous equilibria, electrochemistry, nuclear chemistry, organic chemistry, and descriptive inorganic chemistry. The laboratory includes both quantitative experiments and qualitative analysis. *Note: No UC credit for Chemistry 51 or 60 if taken after Chemistry 101.* 

## 211 Organic Chemistry for Science Majors I (5) UC:CSU

(Formerly Chemistry 14)

Prerequisite: Chemistry 102 with a grade of "C" or better.

The student is introduced to structure, bonding, naming, stereochemistry and functional group chemistry with emphasis on reactions and reaction mechanisms. In the laboratory, the essential skills of preparation, isolation, purification and identification of organic compounds are presented.

#### 212 Organic Chemistry for Science Majors II (5) UC:CSU

(Formerly Chemistry 18)

Prerequisite: Chemistry 211.

Chemistry 212 is a continuation of Chemistry 211 with additional emphasis on the remaining functional groups as well as on multistep synthesis and reaction mechanisms in stereochemistry and modern instrumental and analytical methods. Special attention is given to reactions and organic compounds of biochemical importance. Significant laboratory time is devoted to synthesis of complex organic compounds.

## **CHICANO STUDIES**

### 8 The Mexican American in the History of the

United States (3) UC:CSU (Same as History 44)

The course will introduce students to the background of the political, social, economic and cultural development of the United States from Reconstruction to the present, with particular emphasis on the contributions of the Mexican-American to the development of the modern United States. There will also be discussion of key events in the history and development of Mexico, when appropriate. Also included is a continued survey of the United States Constitution. *UC Transfer Credit Limit: A maximum of one course from Chicano Studies 8: History 12, 13, 44.*