20 Reciprocating Powerplant Overhaul Laboratory (2)
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)
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)
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)
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)
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.

31 Inspection Authorization for Aviation Mechanics (3) NDA
Prerequisite: FAA Mechanic Certificate with Airframe and Powerplant ratings.
Instruction is offered to the Certificated Aviation Mechanic to review regulations and inspection procedures in preparation for the Federal Aviation Administration Mechanic Inspection Authorization.

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

3 Introduction to Biology (4) UC:CSU
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.
Note: UC Transfer Credit Limit: A maximum of one course from Biology 3 or 5 will be accepted for credit. No credit will be given for Biology 3 or 5 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
(Biology 6 & 7 equal CAN BIO I SEQ A)
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.

7 General Biology II (5) UC:CSU
(Biology 6 & 7 equal CAN BIO I SEQ A)
(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.

106 Anatomy of the Head and Neck for the Dental Hygienist (2)
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.
**BROADCASTING**

1 Fundamentals of Radio and Television Broadcasting (3) CSU
Required of all Broadcasting majors; open to others.
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.

5 Radio and Television Acting (3) CSU
In this course, the fundamentals of acting for the camera are explored. Demonstrations, exercises and improvisations are used to practice the techniques, and scenes are practiced, taped and critiqued.

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.

14 Broadcast Station Management (3) (RPT 1) CSU
This course offers a study of the elements, problems, and responsibilities in broadcast and cable management. Emphasis is placed on an examination of the management function as it relates to Federal Communications Commission (FCC) regulations.

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.

911 Cooperative Education - Broadcasting (1) (RPT 3) CSU
921 Cooperative Education - Broadcasting (2) (RPT 3) CSU
931 Cooperative Education - Broadcasting (3) (RPT 3) CSU
941 Cooperative Education - Broadcasting (4) (RPT 3) CSU
See “Cooperative Education” section for complete details on the requirements.

**BUSINESS**

Also listed alphabetically in this catalog: Accounting, Business, Computer Applications and Office Technologies, Computer Science 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.

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, proofreaders’ 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.

61 Foundation Essentials: Values and Ethics (.5) NDA
This course emphasizes the importance of values and ethics for supervisors in the workplace.

62 Basic Time and Space Management (.5) NDA
This course is an introduction to time and space management using specific tools.
63 Communicating with People (.5) NDA
Key elements in communicating within business organizations are introduced. The course includes verbal and non-verbal communications, and the development of listening skills.

64 Team Building (.5) NDA
An understanding of how teams work, common problems teams encounter, and how to solve these problems are the focus of this course. Students will learn to recognize different team player styles, and will be introduced to team building in the workplace.

65 Decision Making and Problem Solving (.5) NDA
Students are introduced to a variety of problem solving techniques and decision-making processes most important for a supervisor.

66 Customer Service (.5) NDA
Certain key skills and attributes are vital for meeting customers' needs. Students will be introduced to the concepts of internal and external customers, customer satisfaction, and customer retention. Communicating with customers, developing positive attitudes, handling complaints and the importance of sales skills are also emphasized.

67 Attitude in the Workplace (.5) NDA
This course presents key skills for maintaining a positive attitude in the workplace. Topics include the three types of attitudes, how attitudes are communicated, and how to affect one's own attitude. Primary causes of bad attitude, turnaround strategies, and specific techniques for improving the attitudes of others are also explored.

68 Conflict Resolution (.5) NDA
This course presents an analysis of attitudes and behaviors which create conflict between individuals and groups within an organization.

69 Stress Management, Job Burnout, and Counseling (.5) NDA
Supervisors need various skills to combat job stress and burnout in the workplace. This course will enable supervisors to recognize stress and learn how to manage it, recognize job burnout and what they can do about it, and how to counsel employees in a variety of situations.

70 Managing Organizational Change (.5) NDA
This course addresses change, and the influence it has on an organization and its members. Understanding organizational change, theoretical models, stages of change, and how to manage change are all covered.

185 Directed Study - Business (1) CSU
285 Directed Study - Business (2) CSU
385 Directed Study - Business (3) CSU

911 Cooperative Education - Business (1) (RPT 3)
921 Cooperative Education - Business (2) (RPT 3)
931 Cooperative Education - Business (3) (RPT 3)
941 Cooperative Education - Business (4) (RPT 3)
See “Cooperative Education” section for complete details on the requirements.

CHEMISTRY

51 Fundamentals of Chemistry I (5) UC:CSU
(Formerly Chemistry 10)
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.

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.
Note: UC transfer credit limit 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 (CAN CHEM 2)
(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.
Note: No UC credit for Chemistry 51 or 60 if taken after Chemistry 101. One course maximum credit for 51 or 60.

102 General Chemistry II (5) UC:CSU (CAN CHEM 4)
(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.