

SUBJECTS AND COURSES

COURSE DESCRIPTIONS - BIOLOGY (BIO)

BIO 101 General Biology I w/Lab

Introduction to Biology I is the first of a two-course sequence designed for non-science majors. It covers historical studies illustrating the scientific method, cellular structure, bioenergetics, cell reproduction, Mendelian and molecular genetics, and a survey of human organ systems. **5 Credit Hours**

BIO 102 General Biology II w/Lab

BIO-101(General Biology I w/Lab) with a grade of D or higher or BIO-101(General Biology I w/Lab) with a transfer-in grade of C or higher Prerequisite: BIO 101 Introduction to Biology II is the second of a two-course sequence for non-science majors. It covers evolutionary principles and relationships, environmental and ecological topics, classification, and a survey of biodiversity. **5 Credit Hours**

BIO 103 Principles of BIO I w/Lab

This is an introductory course for both science and nonscience majors. It covers physical, chemical, and biological principles common to all organisms. These principles are explained through a study of cell structure and function, cellular reproduction, basic biochemistry, cell energetics, the process of photosynthesis, and Mendelian and molecular genetics. Also included are the scientific method, basic principles of evolution, and an overview of the diversity of life with emphasis on viruses, prokaryotes, and protists. A 120 minute laboratory per week is required. **5 Credit Hours**

BIO 104 Principles of Biology II w/Lab

BIO-103(Principles of BIO I w/Lab) with a grade of D or higher or BIO-103(Principles of BIO I w/Lab) with a transfer-in grade of C or higher This introductory course synthesizes basic ecological and evolutionary relationships while surveying plant, fungi, and animal diversity, comparing classification, morphology, physiology, and reproduction. A 180-minute laboratory per week is required. **6 Credit Hours**

BIO 120 Medical Terminology

This course is a survey of words, terms, and descriptions commonly used in medical arts. Emphasis is placed on spelling, pronunciation, and meanings of prefixes, suffixes, and roots. No laboratory is required.

3 Credit Hours

BIO 201 Human Anatomy/Physiology w/Lab

BIO-103(Principles of BIO I w/Lab) with a grade of C or higher or BIO-103(Principles of BIO I w/Lab) with a transfer-in grade of C or higher This course covers the structure and function of the human body. Included is an orientation of the human body; a study of cells and tissues, joints, the integumentary, skeletal, muscular, and nervous systems; and the senses. Dissection, histological studies, and physiology may be featured in the laboratory experience. A 120-minute laboratory per week is required. **5 Credit Hours**

BIO 202 Human Anatomy/Physiology w/Lab

BIO-201(Human Anatomy/Physiology w/Lab) with a grade of D or higher or BIO-201(Human Anatomy/Physiology w/Lab) with a transfer-in grade of C or higher

Human Anatomy and Physiology II covers the structure and function of the human body. Included is a study of basic nutrition; basic principles of water; electrolyte; acid-base balance; and the endocrine, respiratory, digestive, excretory, cardiovascular, lymphatic and reproductive systems. Dissection, histological studies, gross anatomy, and physiology are featured in the laboratory experience. Laboratory is required.

5 Credit Hours

BIO 220 General Microbiology

BIO-103(Principles of BIO I w/Lab) with a grade of C or higher or BIO-103(Principles of BIO I w/Lab) with a transfer-in grade of C or higher This course covers the fundamental principles of microbiology, which includes the characteristics of bacteria, archaea, eukaryotes, and viruses; cell functions and microbial genetics; chemical and physical control methods of microbial growth; and interactions between microbes and humans in relation to pathology, immunology, and the role of normal biota. The laboratory experience focuses on microbiological techniques including culturing, microscopy, staining, identification, and control of microorganisms. This course requires 240 minutes of laboratory per week. **6 Credit Hours**

BIO 250 Directed Studies of Biology

This course is designed for independent study in specific areas of biology chosen by the student in consultation with a faculty member and carried out under faculty supervision. **3 Credit Hours**

BIO 251 Directed Studies of Biology

BIO-250(Directed Studies of Biology) with a grade of C or higher This course is designed for independent study in specific areas of biology chosen by the student in consultation with a faculty member and carried out under faculty supervision. **2 Credit Hours**