# **Biology (BIO)**

### **BIO 001A**

**Cell and Molecular Biology** Class Hours: 54 Lecture | 54 Laboratory

**Prerequisite(s):** CHEM 001A **Transfers to:** UC/CSU C-ID: BIOL 190

BIO 001A cover principles and applications of prokaryotic and eukaryotic cell structure and function, biological molecules, homeostasis, cell reproduction and its controls, molecular genetics, classical/Mendelian genetics, cell metabolism including photosynthesis and respiration, and cellular communication. The philosophy of science, methods of scientific inquiry and experimental design are foundational to the course.

#### **BIO 010 Fundamentals of Biology**

Class Hours: 36 Lecture | 54 Laboratory Advisory(s): ENG 051A **Transfers to:** UC/CSU

BIO 010 is recommended for the non-science major. The primary objective of this course is to teach basic biological concepts as they relate to cells and organisms. Consideration will be given to the cellular and chemical basis of life, genetics, evolution, and ecology.

#### **BIO 015 Biology for Education**

Class Hours: 36 Lecture | 54 Laboratory Advisory(s): ENG 051A Transfers to: UC/CSU

BIO 015 is required for Liberal Studies students seeking a Multiple Subject Teaching Credential and transferring to the California State University system. The primary objective of this course is to teach biological concepts as they relate to the cell and the organism as a whole. Consideration will be given to the cellular and chemical basis of life, genetics, evolution, and ecology.

#### **BIO 032 Human Anatomy**

Class Hours: 54 Lecture | 54 Laboratory **Prerequisite(s):** MATH 063 Advisory(s): ENG 051A Transfers to: UC/CSU **C-ID:** BIOL 110B

BIO 032 examines the structural organization of the human body: gross and microscopic structure of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems, from cellular to organ system levels of organization. This course is primarily intended for nursing, allied health, kinesiology, and other health related majors.

#### **BIO 035** Human Physiology

Class Hours: 54 Lecture | 54 Laboratory Prerequisite(s): MATH 063, or MATH 064, ENG 051A Advisory(s): BIO 010 or BIO 015, and CHEM 002A Transfers to: UC/CSU **C-ID:** BIOL 120B

BIO 035 examines the physiological principles, function, integration and homeostasis of the human body at the cellular, tissue, organ, organ system and organism level: integumentary system, bone, skeletal, smooth and cardiac muscles, nervous system, sensory organs, cardiovascular system, lymphatic and immune systems, respiratory system, urinary system, digestive system, endocrine system, and reproductive system. This course is primarily intended for Nursing, Allied Health, Kinesiology, and other health related majors.

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## BIO 038 Microbiology

Class Hours: 54 Lecture | 54 Laboratory Prerequisite(s): CHEM 002A Advisory(s): ENG 051A Transfers to: UC/CSU

BIO 038 is a consideration of the morphology, anatomy, physiology, and taxonomy of microorganisms with an emphasis on the methods of isolation, identification, and the diseases they cause.