
Biology (BIO)

BIO 001A **Cell and Molecular Biology** (4)

Class Hours: 54 Lecture | 54 Laboratory

Prerequisite(s): CHEM 001A

Advisory(s): ENG 051A

Transfers to: UC/CSU

C-ID: BIOL 190

Cell and Molecular Biology

BIO 001A is intended for majors, will 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 001B **Organismal Biology** (4)

Class Hours: 54 Lecture | 54 Laboratory

Prerequisite(s): MATH 063

Transfers to: UC/CSU

C-ID: BIOL 140

Organismal Biology

BIO 001B is intended for biology majors as a survey of the basic biology and diversity of unicellular and multicellular organisms. It emphasizes general biological principles, classification, structure, function and evolutionary adaptations of organisms (including plants, fungi, animals, and unicellular organisms) to their environments.

BIO 010 **Fundamentals of Biology** (3)

Class Hours: 36 Lecture | 54 Laboratory

Advisory(s): ENG 051A

Transfers to: UC/CSU

Fundamentals of Biology

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 the cell and the organism as a whole. Consideration will be given to the cellular and chemical basis of life, genetics, evolution, and ecology. Not open for credit to students who have earned credit in BIO 015 or equivalent.

BIO 011 **Biology of Death Valley** (1)

Class Hours: 2 Lecture | 46 Laboratory

Transfers to: CSU

Biology of Death Valley

BIO 011 is a one-unit Biology field course with a focus on the Trans-Sierra region, specifically the Mojave Desert and Death Valley. Students will observe and analyze the biological, physical, and cultural patterns and process including landforms, weather, geology, fauna and flora, and history of the regions.

BIO 015 **Biology for Education** (3)

Class Hours: 36 Lecture | 54 Laboratory

Advisory(s): ENG 051A

Transfers to: UC/CSU

Biology for Education

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 (4)*Class Hours:* 54 Lecture | 54 Laboratory*Prerequisite(s):* ENG 051A and MATH 063 OR 064*Take MATH-063(1863) MATH-064(2017) MATH-015(1857) MATH-025(2812) MATH-045(1860) MATH-010A(2752) MATH-001A(1852) MATH-001B(1853) MATH-002A(2810) MATH-002B(2811) MATH-065 or EQ-MATH063; Minimum grade C,P,CR.:**Transfers to:* UC/CSU*C-ID:* BIOL 110B

Human Anatomy

BIO 032 explores 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 (4)*Class Hours:* 54 Lecture | 54 Laboratory*Prerequisites(s):* ENG 051A and MATH 063 or 064*Take MATH-063(1863) MATH-064(2017) MATH-015(1857) MATH-025(2812) MATH-045(1860) MATH-001A(1852) MATH-001B(1853) MATH-002A(2810) MATH-002B(2811) MATH-065 or EQ-MATH063; Minimum grade C,P,CR.:**Advisory(s):* BIO 032, and CHEM 001A, or CHEM 002A*Transfers to:* UC/CSU

Human Physiology

BIO 035 is the study of 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.

BIO 035L General Human Physiology Lab (1)*Class Hours:* 54 Laboratory*Prerequisite(s):* BIO 035 or concurrent enrollment in BIO 035 (Required, Previous or concurrent).*Transfers to:* UC/CSU

P/NP

General Human Physiology Lab

BIO 035L is a lab component to BIO35 designed to accommodate students requiring a face-to-face instructional modality for human physiology laboratory. Students will receive a letter grade but no course credit if they have completed or are currently enrolled in Biology 035.

BIO 038 Microbiology (4)*Class Hours:* 54 Lecture | 54 Laboratory*Prerequisite(s):* CHEM 001A or CHEM 002A*Transfers to:* UC/CSU

Microbiology

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