

BIOLOGY (BIOU)

BIOU 101 Introduction to Biology

This course introduces the principles and concepts of biology with an emphasis on the impact of the human footprint on our planet. Students will examine basic cell structure and function, metabolism, cell growth, and genetics. Students will also explore concepts of evolution and the interaction between living organisms and their environment. (not offered in 2023-2024) 3 credits.

BIOU 102 General Biology Laboratory

In this lab, students will learn about lab safety and investigate topics such as the microscope, cells and the scientific method. Students will also gain an understanding of basic chemistry, cells structure, plant and animal dissections, energy systems, mitosis and genetics. 1 credit.

BIOU 201 Human Anatomy with Laboratory

Prerequisite: BIOU 101.

This course provides a study of the anatomical structure of the human body. Emphasis on gross and histological study of the skeletal, muscular, cardiovascular, respiratory, nervous, endocrine, lymphatic, digestive, urinary, and reproductive systems. This course is only offered through the School of Extended Education. 3-4 credits.

BIOU 202 Human Physiology with Laboratory

Prerequisite: BIOU 101 and BIOU 201.

Presents the physiology of human body systems with emphasis upon functions of muscular, cardiovascular, respiratory, nervous, endocrine, lymphatic, digestive, urinary, and reproductive systems. This course is only offered through the School of Extended Education. 3-4 credits.

BIOU 332 Microbiology

Prerequisites: BIOU 101 and CHMU 101.

This course covers basic concepts of microbiology with an emphasis on medically important microorganisms and infectious diseases. Topics include different kinds of cells, microscopy, microbial metabolism and growth, antimicrobial techniques, epidemiology, and immune system responses to pathogens. Students will participate in a lab component which emphasizes aseptic technique, isolation, and culture as well as identification of microorganisms, microscopy, and staining techniques. (Not offered in 2023-2024) 4 credits.

BIOU 340 Anatomy and Physiology A

This course provides students with fundamental knowledge of principles and concepts of human structure and function. The curriculum is guided by an organ system approach to the study of the human body which emphasizes the integumentary, skeletal, muscular, nervous, sensory and endocrine systems. Students will participate in laboratories to develop skills analyzing scientific data and relating biological structures to their respective functions. (not offered in 2023-2024) 4 credits.

BIOU 341 Anatomy and Physiology B

Prerequisite: BIOU 340.

This course provides students with an advanced understanding of anatomy and physiology after completion of BIOU 340. Topics include cardiovascular, lymphatic/immune, respiratory, digestive, excretory, and reproductive systems. An overview of human development and genetics will comprise the final component of this course. Students will participate in laboratory work to deepen their practical knowledge. (Not offered in 2023-2024) 4 credits.