(BL) BIOLOGY LAB

Courses

BL 120. Functional Anatomy and Physiology Lab. 1 Hour.
Functional Anatomy and Physiology Lab is a 1 credit lab that students take at the same time as taking the lecture part of the course, BY 120. It is a laboratory designed to give the non-science major knowledge of the human body and its relationship with the environment. Topics covered parallel the lecture topics in BY 120 and include the chemical basis of life, the anatomy & physiology of all organ systems.

BL 191. General Biology Lab I. 1 Hour.
This laboratory course is to be taken concurrently with BY 191. It is designed to reinforce the fundamental biology concepts discussed in lecture as well as introduce students to laboratory procedures and the basics of the scientific method.

BL 192. General Biology Lab II. 1 Hour.
This laboratory course is to be taken concurrently with BY 192. This course is designed to provide hands-on experience with plant and animal diversity, comparative anatomy and physiology, as well as the collection and analysis of lab and field data.

BL 221. Anat/Physiology Lab I. 1 Hour.
This laboratory course is to be taken concurrently with BY 221. It is designed to reinforce the fundamental anatomy and physiology concepts discussed in lecture, with a focus on understanding the organization of the human body at the cellular, tissue, and organ system levels, including epithelial tissues, skin, muscles, nerves, and senses by using models, data collection, and dissections.

BL 222. Anatomy/Physiology Lab II. 1 Hour.
This laboratory course is to be taken concurrently with BY 222. It is designed to reinforce the fundamental anatomy and physiology concepts discussed in lecture, with a focus on major organ systems, such as the respiratory, cardiovascular, digestive, and reproductive systems using models, data collection, and dissections. Prerequisite(s): BL 221.

BL 240. Ecology Lab. 1 Hour.
This lab focuses on ecological research principles and is designed to complement and reinforce the topics discussed in BY 240. The labs will include reading primary literature, case-studies, identification of local flora and fauna, and field and laboratory data collection and analysis.

BL 241. Microbiology Lab. 1 Hour.
This laboratory course is to be taken concurrently with BY 241. Students will gain experience handling and identifying microorganisms. Several biochemical and microbiological techniques will be learned, including using of a microscope, culturing, plating, and staining. Students will also learn about controlling microbial growth and testing for infection using immunological assays.

BL 291. Cell Biology Laboratory. 1 Hour.
This course is the hands-on laboratory component of BY 291 (Cell Biology). It is designed to introduce the techniques used to study cell structure and function. By the end of the semester you should be familiar with cell identification, cell culture, transfection, protein purification, SDS-PAGE, and Western blot procedures.

BL 354. General Microbiology Lab. 1 Hour.
This laboratory class will provide students an opportunity to practice microbial techniques including bacterial isolation, culture on various media, and biochemical identification of bacteria. Students will also learn gDNA isolation, 16S rRNA sequencing, and phylogenetics. The course will reinforce microbial systems and how microorganisms interact with each other. Prerequisite(s): BL 191 and CX 180 and CX 182 and (MS 141 or MS 180 or MS 181 or MS 182).