

## BIO 233: Human Anatomy and Physiology I

This course studies the structure and function of human tissues, organs, and organ systems. Topics include tissues; integumentary, skeletal, and muscular systems; and the nervous system. The laboratory component includes occasional dissections. The course is intended primarily for students in the health sciences. Prerequisites: High school Chemistry with a grade of C or better or CHM 090 with a CC or better, and BIO 111 or BIO 121 with a grade of C or better. Three lecture hours and two laboratory hours per week. Instructional Support Fee applies. Gen. Ed. Competencies Met: Scientific Reasoning and Discovery.

## Course Student Learning Outcomes

1. Define anatomy and physiology and differentiate the levels of structural organization of the human body. 2. Differentiate anatomical structures in the tissue level of organization (epithelial, connective, muscle, and nervous). 3. Analyze and interpret anatomical and physiological aspects of the integumentary system. 4. Identify the anatomical structures of the skeletal and muscular systems at the different levels of organization, and describe the physiological aspects of these systems. 5. Distinguish and classify the divisions, structures, and functions of the nervous system. 6. Summarize the physiology of conduction of a nervous impulse or action potential with particular attention to the events which happen at synapses and neuromuscular junctions. 7. Perform laboratory exercises in a safe and appropriate way, including proper handling of models, microscopes and other laboratory equipment, and the safe handling of any fresh or preserved animal specimens during assigned laboratory dissections.

Credits: 4
Program: Biology

1 2024-25 Catalog