

BIOL& 241 : Human Anatomy & Physiology I with Lab

Credits 5

Quarter Offered Fall, Winter

Structure and function of the human body. Homeostasis; tissues; integumentary, skeletal, nervous, and muscular systems. This class may include students from multiple sections. (Natural Sciences with Lab, Elective)

Prerequisites

Eligibility for both [ENGL& 101](#) and [MATH 90](#); 2.0 or higher in [BIOL& 160](#) or [BIOL& 222](#)

Course Outcomes

Explain and give examples of the basic themes and concepts of the cells, including basic cell chemistry, properties of water and pH, basic organic chemistry, and properties of organic macromolecules, cell structure and function, membrane structure and function, metabolism and enzyme function, respiration and fermentation, photosynthesis, cell communication, and mitosis.

Use and define descriptive anatomical and directional terminology such as anatomical position, directional terms, sections, body cavities and regions, and body membranes.

Explain and give examples of the four types of tissues found in the human body, their functions, and which organs they make up.

List the general functions of, describe the gross and microscopic anatomy of, and explain the physiological functions of the following systems of the human body: integumentary, skeletal, nervous, muscular, and special senses.

Explain and give examples of select pathologies of each system and drugs used to treat them.

Demonstrate ability to process information and experiences in the form of laboratory presentations to convey findings of internet and/or text research using appropriate language.

Describe connections of the covered concepts of biology to their local environments, possible future careers, and daily lives.