

BIOL 107 Anatomy and Physiology 1

Credit Hours: 4

Scheduled hours per week

Lecture: 3

Lab: 2

Other: 0

Catalog Course Description:

An introduction to normal structure and function of the human body. The course covers principles of chemistry compounds (biochemistry), cells, tissue, and organs of the body. Four systems are studied for gross and microscopic anatomy and normal functioning; these are integumentary, skeletal, muscular, and nervous systems. The lab work emphasizes microscopic work on cells and tissues, study of bones and muscles, and dissections of brain and eyeball.

Pre-requisites: None

Co-requisites: None

Course Learning Outcomes:

- Demonstrate a knowledge of the basic organization of the living organism
- Demonstrate critical thinking skills using data and analysis of information
- Demonstrate basic chemistry concepts including biological molecules
- Identify cellular structures and their functions
- Identify tissue types along with their locations and functions
- Demonstrate a knowledge of the anatomy and physiology of skin and its accessory organs
- Demonstrate a knowledge of basic bone structure and function, bones names, and bone markings
- Demonstrate a knowledge of muscle anatomy and physiology, muscle names and associated actions
- Demonstrate a knowledge of neuroanatomy including neuron and neuroglia structure and function, brain and sensory organ anatomy and physiology, and selected nerves and their innervations

Topics to be studied:

- Anatomical terminology
- Chemicals of the body – basic chemistry and organic compounds
- Cellular structure and function
- Tissues and organ structure
- Survey of the integumentary system
- Survey of the skeletal system
- Survey of the muscular system
- Survey of nervous system

Relationship of Course to Program or Discipline Learning Outcomes:

Relationship of Course to Science Learning Outcomes:	
Students will learn the process and reasoning behind the Scientific Method and be able to conduct experiments that meet the requirements of the model.	X
Students exhibit the basic safety-related rules and regulations of working in the lab.	X

Students be able to recount the basic safety tenants associated with a specific scientific discipline.	X
Students will become proficient at Science Writing.	
Students will recognize and identify the applications of their specific discipline in the 'real world.'	X
Students will accurately recount important milestones in the history of scientific inquiry in their discipline.	X
5/3/2016	

Relationship of Course to General Education Learning Outcomes:	
Composition and Rhetoric Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	
Science & Technology Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	X
Mathematics & Quantitative Skills Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	
Society, Diversity, & Connections Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
5/3/2016	

Special requirements of the course:

None

Additional information:

None

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