

**BIOL 108 Anatomy and Physiology 2**

**Credit Hours:** 4

**Scheduled hours per week**

Lecture: 3

Lab: 2

Other: N/A

**Catalog Course Description:** Continuation of Biology 107. This class includes study of the respiratory, circulatory (blood, heart, vessels) lymphatic, urinary, digestive, endocrine, and reproductive systems. Normal anatomy and physiology is emphasized, but some pathology is included. Lab work includes dissection of the body systems, plus selected physiology experiments in respiratory volumes, blood and blood genetics, urinalysis, and digestion rates. Critical thinking is developed using clinical examples. The students do research as group projects, such as nutrition, development of science events for teens, or clinical interviews. (3 lecture hours, 2 lab hours per week) (Pre-requisite: BIOL 107)

**Pre-requisites:** BIOL 107, BIOL 107L

**Co-requisites:** BIOL 108L

**Course Learning Outcomes:**

- Knowledge of basic anatomy and physiology of the respiratory, circulatory, lymphatic, excretory, digestive, endocrine, and reproductive systems
- Critical thinking to solve analysis problems using clinical situation data and information
- Ability to evaluate information and form conclusions related to data about body parts and clinical findings
- Applications using clinical test and imaging results
- Pathologic changes that occur in the respiratory, circulatory, lymphatic, excretory, digestive, endocrine, and reproductive systems

**Topics to be studied:**

- Anatomy and physiology (normal and abnormal) of the following systems: respiratory, circulatory, lymphatic, excretory, digestive, endocrine, and reproductive systems

**Relationship of Course to Program or Discipline Learning Outcomes:**

<b>Relationship of Course to Science Learning Outcomes:</b>	
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.	X
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

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<b>Relationship of Course to General Education Learning Outcomes:</b>	
<b>Composition and Rhetoric</b> 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.	X
<b>Science &amp; Technology</b> 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
<b>Mathematics &amp; Quantitative Skills</b> Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	X
<b>Society, Diversity, &amp; Connections</b> Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
<b>Human Inquiry &amp; the Past</b> Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	X
<b>The Arts &amp; Creativity</b> Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
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**Special requirements of the course:**

- BIOL 108 fulfills the Anatomy and Physiology requirement for Nursing and other Health Science programs.

**Additional information:**

**Prepared by:** Mary Hetrick

**Date:** 10/20/2017