

Spokane Community College

COURSE LEARNING OUTCOMES (CLO) AND OUTLINE

Course Title: Human Anatomy And Physiology II

Prefix and Course Number: BIOL& 242

Version Date: Fall 2024

Course Learning Outcomes

By the end of this course, a student should be able to:

1. Apply anatomical and physiological concepts of the human body such as the endocrine, cardiovascular, respiratory, lymphatic, digestive, urinary, and reproductive systems to homeostasis and the related treatment of human disorders.
2. Explain effectively a wide range of processes that govern the functions of the human body to both experts and non-experts.
3. Evaluate diverse sources to describe the structure and function of body, including integumentary, skeletal, muscular, and nervous systems.
4. Recognize how anatomical variation contributes to the diversity seen in humanity.
5. Interpret data, such as blood smears, blood pressure, pulmonary ventilation, and urinalysis to their role in understanding the human body's function.
6. Demonstrate proficiency in laboratory skills that utilize anatomical and physiological concepts.

Course Outline:

- I. Endocrine System
 - A. Anatomy
 - i. Identification of major organs of the endocrine system
 - ii. Histology of tissues found within the endocrine system
 - B. Physiology
 - i. Hormonal control of homeostasis
 - ii. Hormonal pathways
- II. Cardiovascular System
 - A. Anatomy
 - i. Identification of major organs of the cardiovascular system
 - ii. Histology of tissues found within the cardiovascular system
 - B. Physiology
 - i. Role of hemodynamics
 - ii. Hematopoiesis
 - iii. Hemostasis
 - iv. Function of the cardiac cycle
- III. Respiratory System
 - A. Anatomy
 - i. Identification of major organs of the respiratory system
 - ii. Histology of tissues within the respiratory system
 - B. Physiology
 - i. Pulmonary ventilation
 - ii. Mechanisms of gas exchange
 - iii. Control of respiration
- IV. Lymphatic System

- A. Anatomy
 - i. Identification of major organs of the lymphatic system
 - ii. Histology of tissues found within the lymphatic system
- B. Physiology
 - i. Mechanisms of innate and adaptive immunity
 - ii. Mechanisms of cell and humoral mediated immunity
 - iii. Development of immune related cells
- V. Digestive System
 - i. Anatomy Identification of major organs of the digestive system
 - ii. Histology of tissues found within the digestive system
- B. Physiology
 - i. Pathway of food through the digestive system
 - ii. Functions of enzymatic and mechanical digestion
 - iii. Roles of accessory organs to digestion
- VI. Urinary System
 - i. Anatomy Identification of major organs of the urinary system
 - ii. Histology of tissues found within the urinary system
- B. Physiology
 - i. Urine production
 - ii. Maintenance of homeostasis via the urinary system
- VII. Reproductive System
 - i. Anatomy Identification of major organs of the reproductive system
 - ii. Histology of tissues found within the reproductive system
- B. Physiology
 - i. Process of reproductive development into adulthood
 - ii. Role of the endocrine system in regulating reproductive
 - iii. Processes of gametogenesis
 - iv. Development of secondary sexual characteristics