

# Anatomy and Physiology II Lab

8 Modules / Credit-by-Course / Credits 1

## Course Description:

This stand-alone lab course can be used alongside an A&P; II lecture. This lab course continues to develop a comprehensive understanding of the close interrelationship between anatomy and physiology as seen in the human organism. This is accomplished by the continuation of application of Human Anatomy and Physiology by having students complete at-home laboratory experiments, guided by online exploration activities, exercises, and evaluations. It is the second part of a two part series. The lab course places emphasis on organization and overview of the human body, chemical reactions, maintenance of the body, integration, regulatory mechanisms and the dynamics of support and motion, as they pertain to topics not covered in the first session of the course. Specific topics covered include a review of A&P; fundamentals from A&P; I, the endocrine system, the cardiovascular system, the vasculature and respiratory system, the lymphatic and immune systems, the digestive system, the urinary system, fluid and electrolyte balance, and the reproductive system.

## Course Outcomes:

After completing this course, you will be able to:

- Apply correct safety standards.
- Locate and identify anatomical structures.
- Correctly utilize laboratory equipment, such as microscopes (either virtual or in-person), dissection tools, general lab equipment, physiology data acquisition systems, and virtual simulations.
- Communicate results of scientific investigations, analyze data and formulate conclusions.
- Recognize the fundamental concepts of anatomy and physiology, and the organizational scheme and standard terminology of the body;
- Recognize the endocrine system, as well as its structure and function in the chemical communication pathways of the human body;
- Identify the many aspects of the cardiovascular system, including the function and composition of blood, its exchange of gasses and nutrients with the other systems of the body, including the structure, function, and control of the heart;
- Identify and apply the function and structure of the respiratory system, including its interactions with the cardiovascular system, as well as its role in acid-base balance;
- Recognize and label the functions of the digestive system and the mechanisms of nutrient absorption and regulation of metabolism;
- Apply the urinary system's role in acid-base balance and fluid compartment maintenance while performing a urinalysis;
- Distinguish the function of the human reproductive system and its principal components and recognize prenatal development and process of labor and delivery.

## E-Book:

- McGraw-Hill Connect – Lab activities based on Seeley's Anatomy and Physiology, 13th International Edition, McGraw Hill Education. (Textbook reading is not required for this course; however, if you need information on topics covered, you can use the textbook above)

## Open Education Resources (OER's)

If you are struggling with a term or concept, you can utilize the links below to search for the concept or term to find additional resources and explanations.

The Crash Course (<https://thecrashcourse.com/topic/anatomy/>)

Inner Body (<https://www.innerbody.com/htm/body.html>)

Visible Body (<https://www.visiblebody.com/learn/>)

Carnegie Mellon University: Open Learning Initiative  
(<https://oli.cmu.edu/jcourse/webui/guest/join.do?section=anatomy>)

## Closed Captioning

Lecture videos and extra resource videos have automatic closed captioning. These captions are generated by computer algorithms. To utilize closed captioning, you can click on the CC button at the bottom of a video.

## Accommodating Disabilities

Distance Learning Systems is committed to the belief that every individual should have an equal opportunity in education and seeks to assure access by providing accommodations to individuals with disabilities as defined under the Americans with Disabilities Act of 1990 (ADA) and the ADA Amendments Act of 2008 (ADAAA). Accommodations can include but are not limited to: aids or modifications to courses, materials, or testing, and other services that allow for better access by individuals with disabilities.

Individuals requesting an accommodation should submit a request in writing or in an alternative format that is appropriate for their limitations. The request should include documentation of the disability and information with recommendations of appropriate accommodations. Once eligibility has been established, all accommodations must be requested on a course-by-course basis.

Request can be sent to the Academic Department at [help@gatewayeducation.com](mailto:help@gatewayeducation.com). For any questions or concerns, please contact the Academic Department at 866-684-8802/866-684-8802 ext 2.

## Late Work Policy

This course has a Start Date and an End Date. All activities, assessments, and final exams must be completed by the class's end date. Therefore, a late work policy is not needed for the class. Activities, assessments, or final exams will not be accepted after the class's end date.

It is very important you pace yourself through the class to ensure you have all coursework completed by the course end date.