

Anatomy and Physiology, Semester A

Credits: 0.5

Course Overview and Goals

Anatomy and Physiology, Semester A, is the first part of a two-semester course. The course begins with an overview of the organization and structure of the human body. You will learn to interpret common medical terminology. In addition, you will describe the structures and functions of cells and tissues. You will also learn about the cardiovascular, immune, respiratory, digestive, and renal/urinary systems and common diseases and disorders associated with these systems.

This course consists of 12 lessons organized into three units, three Unit Activities, and three Discussions. Additionally, there is one Course Activity and one Course Project that you need to work on throughout the course. Each lesson contains one or more Lesson Activities. You will grade your work in the Lesson Activities by comparing it to sample responses. You will submit the Unit Activities, Course Activity, and Course Project to your teacher for grading.

By the end of this course, you will be able to do the following:

- ❖ Differentiate the structures of various body systems.
- ❖ Use appropriate technical terms related to anatomy and physiology.
- ❖ Analyze the functions of human cells and body systems.
- ❖ Evaluate diseases, illnesses, and other challenges related to different body systems.
- ❖ Discover treatment options for issues with body systems.

UNIT 1: THE ORGANIZATION OF THE HUMAN BODY (DAYS 1 – 31)

In this unit, you will learn about the organization and structure of the human body. You will interpret medical terms related to anatomy and physiology. You will also learn about the structure and function of cells. Finally, you will identify the primary tissues in the human body and describe their characteristics and functions.

Syllabus: *Anatomy and Physiology, Semester A*

Lesson	Lesson Objective
Syllabus and Orientation	Review the Student Orientation and Course Syllabus at the beginning of this course.
The Human Body	Review the organization of the human body.
Medical Terminology	Name technical terms related to anatomy and physiology.
Cellular Structures and Functions	Identify the general structures and functions of human cells.
Tissues	Recognize the different types of tissues in the human body.

UNIT 2: CIRCULATION (DAYS 32 – 54)

In this unit, you will learn about the structure and function of the cardiovascular system. You will analyze the characteristics and composition of blood. You will identify common diseases and disorders of the cardiovascular system and learn about their causes, signs and symptoms, risk factors, and complications. You will also describe the diagnosis, prevention, and treatment of diseases and disorders of the cardiovascular system.

Lesson	Lesson Objective
Blood: Composition, Functions, and Flow	Review the composition and functions of blood.
The Cardiovascular System	Identify the cardiovascular system.
The Heart	Recognize the structure and functions of the heart.
Course Activity	Roles and Responsibilities of First Responders

UNIT 3: IMMUNITY, RESPIRATION, DIGESTION, AND EXCRETION (DAYS 55 – 90)

In this unit, you will learn about the structures and functions of various human body systems: the immune system, respiratory system, digestive system, and renal/urinary system. You will identify common diseases and disorders of each system. You will learn about the causes, signs and symptoms, risk factors, and complications of these diseases and disorders. You will also describe the diagnosis, prevention, and treatment of diseases and disorders of each system.

Lesson	Lesson Objective
The Immune System	Review the lymphatic and immune systems.
The Respiratory System	Recognize the respiratory system.
The Digestive System	Identify the digestive system.
The Accessory Organs of the Digestive System	Recall the structure and functions of the accessory organs of the digestive system.
The Renal/Urinary System	Review the renal/urinary system.
Course Project	A Healthy Lifestyle