Collapse

Anatomy & Physiology, Part 1

ATTENTION

Grading may take up to 7 days at semester end and during the summer semester!
Submit your **last assignment two weeks** before your school's semester ends.

The prerequisites for this course are: Algebra 1 (or integrated Math 1) and Biology

How to Take This Course

Complete all the quizzes and the assignment in each unit. Once the quizzes for a unit are complete, you will have access to the unit test. We recommend you complete the assignment before you attempt the unit test, the assignment will help you prepare. You will have access to the final after you have been enrolled in the course for at least 30 days, all unit tests are completed, and your assignment is **at least**

Unit 1 is the only unit based for an assignment to be graded. To understand the course grading, read the full course instructions.

- Course Instructions
- How This Course Works & Suggested Timeline
- Submitting Your Assignments
- Grading Your Assignments

Meet your teacher for this course and ask a question.

Need help with the course? We offer online tutoring. Find more details about it here.

MANDATORY QUIZ — Completion

You are required to take this quiz before you start the course. To prepare, read the course instructions and the "submitting your assignment" document, watch the video on how this course works page and review the suggested timeline.

- Learning Objectives & Standards Met By This Course
- List of Lab Supplies and Equipment

This is a laboratory science course; all assignments are mandatory. You need to complete each lab as directed and submit the required drawings or photos.

You do NOT have to purchase a lab kit. Here is a **list of supplies and equipment** that you will need for the course.

In order to ensure that students are gaining the proper learning experience from our lab course, Anatomy & Physiology labs require the following:

1. All labs and assignments must be turned in using the documents provided on each lab page. These are found at the bottom of each assignment page. These documents MUST be converted to pdfs before submission.
2. Photos of your labs are required in order to receive a grade, as indicated in the lab. (All photos need to be in .jpeg format and will be reviewed when the document) Labs that do not have proper photo evidence may be returned for revision or result in a reduced score, regardless of written content. Refer to the lab instructions for the specific photos you must include.
3. When providing a diagram or drawing, they need to be hand drawn, not computer generated.
4. In order to keep within the Unit 1: Academic Integrity Policy, photos, diagrams or drawings taken from the internet or generated by an AI MUST answer for any lab or assignment.

Unit 1: Body Organization & Homeostasis

In this unit, students will:

- Explain the relationship between anatomy and physiology and describe the levels of organization in the human body.
- Differentiate between anatomical, sectional, and systemic medicine and explain their role in maintaining life.
- Apply anatomical planes, directional terms, and body regions to describe the locations of body structures.
- Identify major body cavities, abdominal quadrants, and the organs they contain.
- Explain how homeostasis is maintained through negative and positive feedback mechanisms.

Unit 1 Study Guide

This study guide will help you preview the concepts and guide your learning as each new skill or concept is introduced. Use this study guide as the foundation of your notes. You may use it on the unit quizzes, unit tests, and course final.

Click on the link above, and make a copy of the file. If you don't have access to Google Docs, preview the study guide and download an editable version or PDF.

- 1.1 Introduction to Anatomy and Physiology
- Quiz 1.1 — Completion
- 1.2 Levels of Organization in the Human Body
- Quiz 1.2 — Completion
- 1.3 Metabolism
- Quiz 1.3 — Completion
- 1.4 Planes and Directional Terms
- Quiz 1.4 — Completion
- 1.5 Body Cavities and Organs
- Quiz 1.5 — Completion
- 1.6 Homeostasis and Feedback Mechanisms
- Quiz 1.6 — Completion
- Unit 1 Assignment: Modeling Homeostasis Through Temperature Regulation — Completion
- Unit 1 Test — Completion

Not available unless: The activity Quiz 1.1 is marked complete ... — Show more

Unit 2: Chemistry of Life

In this unit, students will:

- Describe the structure of atoms and distinguish between elements, compounds, and mixtures.
- Compare ionic, covalent, and hydrogen bonds and explain their importance in living organisms.
- Explain the role of electrolytes, ions, and water in maintaining physiological balance.
- Analyze the properties of water and the importance of pH in human body systems.
- Describe the structure and function of carbohydrates, lipids, proteins, and nucleic acids and explain how they support cellular respiration.

Unit 2 Study Guide

This study guide will help you preview the concepts and guide your learning as each new skill or concept is introduced. Use this study guide as the foundation of your notes. You may use it on the unit quizzes, unit tests, and course final.

Click on the link above, and make a copy of the file. If you don't have access to Google Docs, preview the study guide and download an editable version or PDF.

- 2.1 Matter & Atomic Structure
- Quiz 2.1 — Completion
- 2.2 Elements & Compounds
- Quiz 2.2 — Completion
- 2.3 Characteristics of Bonds
- Quiz 2.3 — Completion
- 2.4 Electrolytes
- Quiz 2.4 — Completion
- 2.5 Water Properties & pH
- Quiz 2.5 — Completion
- 2.6 Macromolecules & Cellular Respiration
- Quiz 2.6 — Completion
- Unit 2 Assignment: Investigating Diffusion Using a Potato — Completion
- Unit 2 Test — Completion

Not available unless: The activity Quiz 2.1 is marked complete ... — Show more

Unit 3: Cells & Transport

In this unit, students will:

- Identify the major structures and organelles of animal cells and explain their functions.
- Describe the composition of the cell membrane and explain how it regulates movement into and out of cells.
- Compare intracellular and extracellular fluid and explain their roles in maintaining homeostasis.
- Distinguish between passive and active transport, including diffusion, osmosis, and membrane pumps.
- Predict how cells respond to hypotonic, hypertonic, and isotonic solutions.

Unit 3 Study Guide

This study guide will help you preview the concepts and guide your learning as each new skill or concept is introduced. Use this study guide as the foundation of your notes. You may use it on the unit quizzes, unit tests, and course final.

Click on the link above, and make a copy of the file. If you don't have access to Google Docs, preview the study guide and download an editable version or PDF.

- 3.1 Cell Structure & Organelles
- Quiz 3.1 — Completion
- 3.2 Cell Membrane & Permeability
- Quiz 3.2 — Completion
- 3.3 Intracellular vs. Extracellular Fluid
- Quiz 3.3 — Completion
- 3.4 Passive Transport
- Quiz 3.4 — Completion
- 3.5 Active Transport
- Quiz 3.5 — Completion
- 3.6 Osmotic Effects on Cells in Solutions
- Quiz 3.6 — Completion
- Unit 3 Assignment: Build a Cell and Transport Methods — Completion
- Unit 3 Test — Completion

Not available unless: The activity Quiz 3.1 is marked complete ... — Show more

Unit 4: Cell Cycle, Tissues & Skin

In this unit, students will:

- Compare mitosis and meiosis and explain their roles in growth, repair, and reproduction.
- Identify the four major tissue types and relate their structures to their functions.
- Distinguish among the major tissue membranes and explain their protective roles.
- Describe the structures and functions of the integumentary system, including skin, hair, nails, and glands.
- Explain how disorders of the skin and integumentary system affect normal body function.

Unit 4 Study Guide

This study guide will help you preview the concepts and guide your learning as each new skill or concept is introduced. Use this study guide as the foundation of your notes. You may use it on the unit quizzes, unit tests, and course final.

Click on the link above, and make a copy of the file. If you don't have access to Google Docs, preview the study guide and download an editable version or PDF.

- 4.1 Mitosis vs. Meiosis
- Quiz 4.1 — Completion
- 4.2 Tissue Types
- Quiz 4.2 — Completion
- 4.3 Tissue Membranes
- Quiz 4.3 — Completion
- 4.4 Integumentary Structures
- Quiz 4.4 — Completion
- 4.5 Skin Layers
- Quiz 4.5 — Completion
- 4.6 Glands (Endocrine vs. Exocrine)
- Quiz 4.6 — Completion
- 4.7 Integumentary Disorders
- Quiz 4.7 — Completion
- Unit 4 Assignment: Investigating The Skin's Protective Barrier — Completion
- Unit 4 Test — Completion

Not available unless: The activity Quiz 4.1 is marked complete ... — Show more

Unit 5: Skeletal System

In this unit, students will:

- Describe the major functions of the skeletal system and explain how bones grow, remodel, and repair.
- Classify bones by shape and identify the major structures of a typical long bone.
- Identify common bone markings and explain their functional significance.
- Differentiate between the axial and appendicular skeletons and identify their major components.
- Describe the structure and function of joints and ligaments and explain how skeletal disorders affect movement.

Unit 5 Study Guide

This study guide will help you preview the concepts and guide your learning as each new skill or concept is introduced. Use this study guide as the foundation of your notes. You may use it on the unit quizzes, unit tests, and course final.

Click on the link above, and make a copy of the file. If you don't have access to Google Docs, preview the study guide and download an editable version or PDF.

- 5.1 Skeletal Functions & Bone Cells
- Quiz 5.1 — Completion
- 5.2 Bone Classification & Structure
- Quiz 5.2 — Completion
- 5.3 Bone Markings
- Quiz 5.3 — Completion
- 5.4 Axial Skeleton
- Quiz 5.4 — Completion
- 5.5 Appendicular Skeleton
- Quiz 5.5 — Completion
- 5.6 Ligaments & Joints
- Quiz 5.6 — Completion
- 5.7 Skeletal Disorders
- Quiz 5.7 — Completion
- Unit 5 Assignment: Investigating Bone Strength — Completion
- Unit 5 Test — Completion

Not available unless: The activity Quiz 5.1 is marked complete ... — Show more

Final Exam

You will have access to the final after you have been enrolled in the course for at least 30 days and when all unit tests are completed, and your assignments are graded.

Warning: You have only ONE attempt at the final. Are you ready to take the final? We highly recommend you take the practice final first, and if you are weak in any area, review the relevant course material again. You have unlimited attempts at the practice final. It will help you to prepare.

Remember, if you want to improve your grade in this course, you need to do that BEFORE you take the final exam.

Good Luck!

Not available unless: The activity MANDATORY QUIZ is marked complete

Course Completion & Requesting a Transcript

Transcript - Send a transcript to your school to report the credits you earned. A transcript will list all the courses you have taken with us, including those still in progress.

Feedback - Before you go, we would appreciate your opinion on the course; please take 1 minute to complete the feedback form. We hope you enjoyed the course!

Course Feedback

Thank you for taking this course! Let us know what you think about it.

Request a Transcript

Notify your school that you have completed your course. Send them a transcript by email or mail. A transcript will list all the courses you have completed and those in progress.