

BIOL 2301 2A1
Anatomy & Physiology I Lecture
Summer 2 - 2026



CREDIT

3 Semester Credit Hours

MODE OF INSTRUCTION

Online

PREREQUISITE/CO-REQUISITE:

Passed the Reading/Writing Sections of TSI or any other accepted test.

Co-requisite Biol 2101

***PLEASE NOTE**

Summer courses are six weeks long but cover the *same amount of material* as courses offered during the regular semester. Because the timeline is significantly condensed, you should expect to devote substantial time each week to keep up with readings, assignments, and assessments. Consistent engagement is essential for success in this accelerated format.

COURSE DESCRIPTION

Anatomy and Physiology I is the first part of a two-course sequence. It is a study of the structure and function of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular, nervous, and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

COURSE OBJECTIVES

Upon successful completion of this course, students will be able to:

1. Use anatomical terminology to identify and describe locations of major organs of each system covered.
2. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.
3. Describe the interdependency and interactions of the systems.
4. Explain contributions of organs and systems to the maintenance of homeostasis.
5. Identify causes and effects of homeostatic imbalances.
6. Identify modern technology and tools used to study anatomy and physiology.

CORE OBJECTIVES

1. **Critical Thinking Skills:** To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. **Communication Skills:** To include effective development, interpretation, and expression of ideas through written, oral, and visual communication
3. **Empirical & Quantitative Skills:** To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. **Teamwork:** To include the ability to connect choices, actions, and consequences to ethical decision-making

INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Zachary Grimes

Email: zgrimes@lit.edu

Office Phone: N/A

Office Location: Online

Office Hours: Online

See Starfish for Available Office Hours

[Click Here for Starfish](#)

REQUIRED TEXTBOOK AND MATERIALS

REQUIRED = Textbook - OpenStax Anatomy & Physiology Levels I and II

Anatomy and Physiology from OpenStax, Print ISBN 1938168135, Digital ISBN 1947172042,

[Click Here for OpenStax Anatomy & Physiology textbook](#)

Your textbook for this class is available for free online and a print copy, can be purchased online, or obtained through Eagle Learning Essentials. [Click Here for Eagle Learning Essentials](#)

Supplemental = Textbook - WikiBooks – Human Physiology

https://en.wikibooks.org/wiki/Human_Physiology

ATTENDANCE POLICY

1. You must log into Blackboard and access this course a minimum of 3 times per week.
2. Late assignments will be accepted with a deduction as a late penalty. Students will receive a zero for assignments not completed.
3. If you wish to drop this course, you must drop it administratively. If you do not drop, you will receive an F for the course.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the [Academic Calendar](#) located on the college [Student Success](#) web page. If you stop coming to class and fail to drop the course, you will earn an “F” in the course.

BIOL 2301 (Tentative) Weekly Checklist Summer I 2026 June 1st – July 7th

Week:	To Do:	Due Date:
<u>Week 1</u> July 8 - July 12 Introduction Directional Terms Study of Life	☒ Discussion Board 1: Introduction ☒ Discussion Board: Netiquette ☒ Mandatory Syllabus Quiz due 07.12.26 ☒ Video Quiz: Introduction to Anatomy & Physiology (Chapter 1) [11 minutes] ☒ Video Quiz: Directional Terms (Chapter 1) [3 minutes 15 seconds] ☒ Video Quiz: Body Planes (Chapter 1) [1m 35s] ☒ Video Quiz: Body Cavities (Chapter 1) [1m 26s] ☒ Discussion Board 2: Regional & Directional Terms ☒ Look over instructions for Individual Project (Health Science Career Poster) due Monday 07.20.26 ☒ Join a group for Group Project (Muscle Video) due 08.02.26	☒ 07.12.26 ☒ 07.12.26 ☒ 07.13.26 ☒ 07.13.26
<u>Week 2</u> July 13 - July 17 Elements, Cells, Tissues Integumentary	☒ Video Quiz: Elements of the Human Body (Chapter 2) [1 m 52 s] ☒ Video Quiz: Levels of Organization in the Body (Chapter 3) [2m 45s] ☒ Video Quiz: Cell Structure (Chapter 3) [7m 22s] ☒ Video Quiz: Tissues (Chapter 4) [10m 43s] ☒ Quiz 1: Ch 1 (Introduction), Ch 2 (Elements), Ch 3 (Cells), Ch 4 (Tiss.) opens 07.17.26 & closes 07.18.26 ☒ Discussion Board 3: Integumentary ☒ Video Quiz: Integumentary System (Chapter 5) [9m 40s] ☒ Quiz 2: Chapter 5 (Integumentary) Opens 07.19.26 & Closes 07.20.26 ☒ Individual Project (Health Science Career Poster) due Monday 07.20.26 ☒ Start working on Group Project (Muscles Video) due 08.02.26.	☒ 07.13.26 ☒ 07.15.26 ☒ 07.15.26 ☒ 07.18.26 ☒ 07.20.26
<u>Week 3</u> July 20 - July 24 Skeletal System & Joints	☒ Individual Project (Health Science Career Poster) due Monday 07.20.26 ☒ Discussion Board 4: Skeletal System Anatomy ☒ Discussion Board 5: Skeletal System/Osteoporosis ☒ Discussion Board 6: Joints ☒ Midterm Exam: Opens 07.24.26 Closes 07.25.26 ☒ Video Quiz: Skeletal (Chapter 6) [7m 59s] ☒ Video Quiz: Axial vs. Appendicular Skeleton (Ch 7) [3m 19s] ☒ Video Quiz: What Bones Tell Us (Ch 8) [6m 26s] ☒ Video Quiz: Whose Bones Are These (Ch 8) [7m 7s] ☒ Video Quiz: Introduction to Joints (Ch 9) [2m 52s] ☒ Video Quiz: Bones and Joints (Ch 9) [9m 22s] ☒ Quiz 3: Chapters 6 – 9 (Skeletal System & Joints) opens 07.26.26 closes 07.27.26	☒ 07.20.26 ☒ 07.21.26 ☒ 07.25.26 ☒ 07.24.26 ☒ 07.27.26

	Work with group members on Group Project (Muscles Video) due 08.02.26	
Week 4 July 27 - July 31 Muscular System	- Discussion Board 7: Muscular System - Video Quiz: Muscular System (Ch 10) [5m 59s] - Video Quiz: How the Muscular System Works (Chapter 11) [4m 45s] - Video Quiz: Muscles (Ch 11) [10m 41s] - Discussion Board 8: Post 2 Comments on Individual Poster Projects - Quiz 4: Chapters 10 – 11 (Muscular System) Opens 07.31.26 Closes 08.01.26 - Submit Group Project (Muscles Video) due 08.02.26	07.28.26 07.29.26 07.29.26 07.29.26 08.01.26 08.02.26
Week 5 August 3 - August 7 Nervous System	- Discussion 9: Nervous System - Discussion 10: Divisions of Nervous System - Video Quiz: Nervous System (Chapter 12) [9m 22s] - Video Quiz: Anatomy of the Nervous System (Chapter 13) [10m 26s] - Video Quiz: Nervous System-Senses (Chapter 14) [10m 32s] - Video Quiz: Nervous System-Senses (Chapter 14) [10m 32s] - Quiz 5: Chapters 12 - 16 (Nervous System) Opens 08.03.26 Closes 08.04.26 - FINAL EXAM Opens 08.07.26 and Closes 08.08.26 (Chapters 10 – 16)	08.03.26 08.03.26 08.04.26 - Final Exam due 08.08.26
Week 6 August 10 - August 14 FINAL EXAM Week	Last Class Day –Friday August 14 Congratulations You made it! Time to Celebrate	08.14.26 

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Quizzes = 20%
- Discussion & Participation = 10%
- Individual & Group Project = 20%
- Midterm & Final Exam = 30%
- Assignments (Video Quizzes, etc) = 20%

Total = 100%

GRADING SCALE

- 90-100 = A
 80-89 = B
 70-79 = C

60-69 = D

0 – 59 = F

TECHNICAL REQUIREMENTS

For the latest technical requirements, including hardware, compatible browsers, operating systems, etc., review the Minimum Computer and Equipment Requirements on the [LIT Online Experience](#) page. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

Quizzes and Exams in this course are administered through Blackboard. Exams will be administered with Respondus **LockDown Browser + Respondus Monitor (webcam)**

Requirements to take exams include:

- A reliable computer, desktop or laptop (phones, chromebooks, tablets, and iPads are not allowed).
- Windows: 10, 8, 7
- Mac: OS X 10.10 or higher
- Adobe Flash Player (bundled with the LockDown Browser installation)
- Web camera (internal or external) & microphone
- A reliable internet service provider. A broadband internet connection.
- A room to take the exam where you are alone (other individuals in the room are not allowed)

Watch these overview videos to understand the tools your will be using to take the exam.

Respondus LockDown Browser: <https://www.youtube.com/watch?v=XuX8WoeAycs#action=share>

Respondus Monitor: <https://www.youtube.com/watch?v=hv2L8Q2NpO4 - action=share>

Respondus **LockDown Browser + Respondus Monitor (webcam)**

Download Instructions:

- Select the quiz or exam in the course
- Under Quiz Requirements, you will see "To take this quiz you must use the Respondus LockDown Browser"
- Below this will appear: "You can use the button below if you have not already downloaded LockDown Browser". Click the button to go to the download page and then follow the instructions
- Use the link to download Respondus LockDown Browser to your computer; follow the installation instructions
- Return to the Quiz page in Brightspace (it may still be open in another tab) and select the quiz
- Select "Launch LockDown Browser"
- The quiz or exam will now start

Note: LockDown Browser only needs to be installed once on a computer or device. It will start automatically from that point forward when a quiz requires it.

Guidelines while taking online quizzes or exams:

- Ensure you're in a location where you won't be interrupted.
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach.
- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it.

- Clear your desk or workspace of all external materials not permitted - books, papers, other devices.
- Remain at your computer for the duration of the test.
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again **before** the exam.
- To produce a good webcam video, do the following:
 - Avoid wearing baseball caps or hats with brims, or hoodies.
 - Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move.
 - If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete.
 - Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted.

The following violations during testing will result in a grade of zero or reduction in points:

- Using technology or electronic devices including, but not limited to, iPads, phones, smart glasses, earbuds, smartwatches.
- Leaving the testing environment or face missing from frame or obscured.
- Noises that might indicate external help.
- Any other questionable activities indicating cheating.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT*

Catalog and Student Handbook. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES

Course Requirements

- A Midterm and Final is required with two attempts given per assessment and uses Respondus Lockdown Browser. The final score will be an **average of attempts**.
- Five quizzes will be given using Respondus Lockdown Browser, with two attempts given per assessment. The final score will be an **average of attempts**.
- Students will complete video quizzes and discussion boards for each unit.
- Students will complete an individual project and a group project. A deduction in points will be given for completing group project without partners.
- Late assignments, **except for the final exam**, will be accepted with a deduction as a late penalty. Students will receive a zero for assignments not completed.

