

**Grimes 202660\_BIOL 2101\_Lab**  
**Anatomy & Physiology I**  
**Summer 2 - 2026**



**CREDIT**

1 Semester Credit Hours

**MODE OF INSTRUCTION**

Online

**PREREQUISITE/CO-REQUISITE:**

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

Co-requisite Biol 2301

**\*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**

The lab provides a virtual learning experience for exploration of human system components and basic physiology. Systems to be studied include integumentary, skeletal, muscular, nervous, and special senses.

**COURSE OBJECTIVES**

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

1. Apply appropriate safety and ethical standards.
2. Locate and identify anatomical structures.
3. Appropriately utilize laboratory equipment such as microscopes, dissection tools, general labware, physiology data acquisition systems, and virtual simulations.
4. Work collaboratively to perform experiments.
5. Demonstrate the steps involved in the scientific method.
6. Communicate results of scientific investigations, analyze data, and formulate conclusions.
7. Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations, and predictions.

## 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](mailto:zgrimes@lit.edu)  
Office Phone:  
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](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's [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 2101 2A1, 2B1 Tentative Weekly Checklist Summer I – 2026 June 1<sup>st</sup> – July 7<sup>th</sup>**

| Week:                                                                                                                                       | To Do:                                                                                                                                                                                                                                                                                                                                                                                                                                                | Due Date:                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <b><u>Week 1</u></b><br><br>Introduction<br>Complete Introductory Materials<br>Syllabus Quiz<br>McGraw Hill Connect<br><br>July 8 - July 12 | <input type="checkbox"/> Discussion Board: Introduction<br><input type="checkbox"/> Register for McGraw-Hill Virtual Labs (Information on Blackboard under “Modules” then <a href="#">S</a> MGH Connect Virtual Labs ->Start Here - MGH Virtual Labs)<br><input type="checkbox"/> Mandatory Syllabus Quiz due 07.12.26<br><input type="checkbox"/> Join a group for Group Lab: Musculoskeletal Disorders (Information on “Modules” page) due 08.02.26 | <input type="checkbox"/> 07.12.26                                          |
|                                                                                                                                             | <input type="checkbox"/> Complete Introductory Materials McGraw-Hill Connect Interactive Labs<br><input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 08.02.26                                                                                                                                                                                                                                               | <input type="checkbox"/> 07.13.26                                          |
| <b><u>Week 2</u></b><br><br>Directional Terms<br>Elements, Cells, Tissues<br><br>July 13 - July 17                                          | <input type="checkbox"/> Module (1): McGraw-Hill Connect Interactive Lab Activities covering Body Orientation, Tests for Macromolecules, and Microscope<br><input type="checkbox"/> Module (1): McGraw-Hill Connect Interactive Lab Activities covering Cells and Tissues<br><input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 08.02.26                                                                   | <input type="checkbox"/> 07.15.26                                          |
| <b><u>Week 3</u></b><br><br>Integumentary System<br>Skeletal System & Joints<br><br>July 20 - July 24                                       | <input type="checkbox"/> Module 2: McGraw-Hill Connect Interactive Lab Activities covering Integumentary System<br><input type="checkbox"/> Module 2: McGraw-Hill Connect Interactive Lab Activities covering Skeletal System & Joints<br><input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 08.02.26                                                                                                      | <input type="checkbox"/> 07.22.26                                          |
| <b><u>Week 4</u></b><br><br>Muscular System<br><br>July 27 - July 31                                                                        | <input type="checkbox"/> Midterm Exam Opens 07.19.26 Closes 07.20.26<br><input type="checkbox"/> Module 2: McGraw-Hill Connect Interactive Lab Activities covering Muscular System<br><input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 08.02.26                                                                                                                                                          | <input type="checkbox"/> 07.20.26<br><br><input type="checkbox"/> 07.29.26 |

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|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <p><b><u>Week 5</u></b></p> <p><b>Nervous System</b></p> <p>August 3rd - August 7th</p> <p><b>Final Exam Week</b></p> | <p><input type="checkbox"/> <b>Module 3: McGraw-Hill Connect Interactive Lab Activities covering Nervous System</b></p> <p><input type="checkbox"/> <b>GROUP PROJECT: Musculoskeletal Disorders</b></p> <p><b>DUE: 08.02.26</b></p> <p><input type="checkbox"/> <b>FINAL EXAM</b> Opens 08.05.26 and Closes 08.06.26 (Chapters 10 – 16)</p> | <p><input type="checkbox"/> 08.05.26</p>                                            |
| <p><b><u>Week 6</u></b></p> <p>July 6<sup>th</sup> – July 7<sup>th</sup></p>                                          | <p><b>Last Class Day – Friday August 14</b></p> <p><b>Congratulations</b><br/><b>You made it! Time to Celebrate</b></p>                                                                                                                                                                                                                     |  |

### STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16- week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

### COURSE EVALUATION

Final grades will be calculated according to the following criteria:

1. Assignments (Lab Activities) = 25%
2. Quizzes MGH = 20%
3. Group Lab Project = 20%
5. Final Exam = 30%

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**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 you 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 exam in the course
- Under Quiz Requirements you will see "To take this exam, 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 exam page in Brightspace (it may still be open in another tab) and select the exam
- Select "Launch LockDown Browser"
- The 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 quiz, follow these guidelines**

- 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 prior to the exam.
- To produce a good webcam video, do the following:
  - Avoid wearing baseball caps or hats with brims.
  - 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 in the Eagles' Nest Room 129. It 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 get in touch with the Special Populations Coordinator at (409)-951-5708 or email [specialpopulations@lit.edu](mailto:specialpopulations@lit.edu). You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](https://www.lit.edu/specialpopulations).

## 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](http://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 log in 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 are required, with two attempts given per assessment, and using Respondus Lockdown Browser. The final score will be an ***average of attempts***.
- Five MGH Lab quizzes, with two attempts given per assessment. The final score will be an ***average of attempts***.
- Students will complete the discussion boards.
- Students will complete a lab 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.

**ACADEMIC DISHONESTY**

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at <http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty>.

**STUDENT EXPECTED TIME REQUIREMENTS**

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