BIOL 2101
Anatomy & Physiology I Lab
Fall 2025

LAMAR INSTITUTE OF TECHNOLOGY

INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Zachary Grimes
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Office Phone: NA
Office Location: NA
Office Hours: See Starfish for Available Office Hours-
Click Here for Starfish

CREDIT

1 Semester Credit Hours (3 hours lecture, 2 hours lab)

MODE OF INSTRUCTION

Online

PREREQUISITE/CO-REQUISITE:

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

Co-requisite Biol 2301

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 lab ware, 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

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. If you stop completing class assignments and fail to drop the course, you will earn an "F" in the course.

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

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.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. 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 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 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 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.

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.

Course Requirements

1. A Midterm and Final is required with two attempts given per assessment using Respondus Lockdown Browser. The final score will be an ***average ofl attempts***.
2. Students will complete virtual labs for each unit.
3. Students will complete a group lab project. A deduction in points will be given for completing group project without partners.
4. Late assignments will be accepted with a deduction as a late penalty. Students will receive a zero for assignments not completed.

Tentative Course Schedule

Instructor reserves the right to modify as needed

Week:	To Do:	Due Date:
Week 1 **Introduction** Aug 25th – 29th	☐ Discussion Board: Introduction ☐ Register for McGraw Hill Virtual Labs (Information on Blackboard under "Modules" then ☐ Syllabus Quiz ☐ Join a group for Group Lab: Musculoskeletal Disorders (Information on "Modules" page) due 11.14.25	☐ 08.31.25
	☐ Complete Introductory Materials McGraw Hill Connect Interactive Labs ☐ Work with group members on Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 09.03.25
Week 2 **Directional Terms** **Elements, Cells, Tissues** Holiday Sep 1st Sep 2nd – 5th	☐ Module 1: McGraw Hill Connect Interactive Lab Activities covering Body Orientation, Tests for Macromolecules, and Microscope ☐ Work with group members on Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 09.07.25
Week 3 **Elements, Cells, Tissues** Sep 8th – 12th	☐ Module 1: McGraw Hill Connect Interactive Lab Activities covering Cells and Tissues ☐ Work with group members on Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 09.11.25
Week 4 **Integumentary System** Sep 15th – 19th	☐ Module 2: McGraw Hill Connect Interactive Lab Activities covering Integumentary System ☐ Work with group members on Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 09.21.25
Week 5 **Skeletal System & Joints** Sep 22nd – 26th	☐ Module 2: McGraw Hill Connect Interactive Lab Activities covering Skeletal System & Joints ☐ Work with group members on Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 09.28.25
Week 6 **Skeletal System & Joints** Sep 29th – Oct 3rd	☐ Module 2: McGraw Hill Connect Interactive Lab Activities covering Skeletal System & Joints ☐ Work with group members on Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 10.05.25
Week 7 **Skeletal System & Joints / Muscular System** Oct 6th – 10th	☐ Module 2: McGraw Hill Connect Interactive Lab Activities covering Skeletal System & Joints ☐ Work with group members on Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 10.12.25

Week 8 **Midterm Exam** Oct 13th – 17th	☐ Midterm Exam *Opens 10.15.25 and closes 10.17.25* ☐ Work with group members on Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 10.17.25
Week 9 **Muscular System** Oct 20th – 24th	☐ Module 2: McGraw Hill Connect Interactive Lab Activities covering Muscular System ☐ Work with group members on Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 10.26.25
Week 10 **Muscular System** Oct 27th – 31st	☐ Module 2: McGraw Hill Connect Interactive Lab Activities covering Muscular System ☐ Work with group members on Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 11.02.25
Week 11 **Nervous System** Nov 3rd – 7th	☐ Module 3: McGraw Hill Connect Interactive Lab Activities covering Nervous System ☐ **DUE SOON →** Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 11.09.25
Week 12 **Nervous System** Nov 10th – 14th	☐ Module 3: McGraw Hill Connect Interactive Lab Activities covering Nervous System ☐ **DUE:** Group Lab (Musculoskeletal Disorders) due 11.14.25	☐ 11.16.25
Week 13 **Nervous System** Nov 17th – 21st	☐ Module 3: McGraw Hill Connect Interactive Lab Activities covering Nervous System	☐ 11.23.25
Week 14 Nov 24th – 25th Nov 26th – 28th Thanksgiving Break	☐ Work on missing assignments ☐ Sleep, rest, relax ☐ Enjoy time with family and friends ☐ Netflix, etc. ☐ Exercise ☐ Read a good book ☐ Do something nice for someone	
Week 16 Dec 1st – 5th Dec 8th – 10th **Review** Final Exam	☐ Review for Final Exam (Chapters 1-16) ☐ Be sure you are caught up on all assignments ☐ FINAL EXAM *Opens 12.06.25 and Closes 12.08.25* (Chapters 1 – 16) ☐ CONGRATULATIONS! YOU MADE IT!! CELEBRATE ☺	☐ FINAL EXAM *due 12.08.25 by 11:59 pm*