

Course Syllabus Spring 2024
202410_BIOL_2101_Online
Anatomy & Physiology I (Lab)
January 16th – May 10th



INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Connie J. Grass, DC, BSHB, BSN
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Office Location: MPC 217
Office Hours: Mon-Fri 9:00 AM – 11:00 PM
Schedule Appointment: <https://www.lit.edu/student-success/starfish>

CREDIT: 1 Semester Credit Hour (2-hour lab)

MODE OF INSTRUCTION: Online

PREREQUISITE/CO-REQUISITE:

Passed the Reading/Writing Sections of COMPASS or any other accepted test. Complete the Online Orientation and answer yes to 7+ questions on the Online Learner Self-Assessment: <http://www.lit.edu/depts/DistanceEd/OnlineOrientation/OOStep2.aspx>

BIOL 2301 lecture must be taken at the same time. Lectures can be taken face-to-face or fully online.

COURSE DESCRIPTION

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

LEARNING OUTCOMES

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, 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.
Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations and predictions.

COURSE OBJECTIVES

Upon completion of this course, the student 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.

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 an informed conclusion.
4. **Teamwork:** To include the ability to connect choices, actions, and consequences to ethical decision-making.
5. **Personal Responsibility:** To include the ability to connect choices, actions, and consequences to ethical decision-making.

COURSE OUTLINE

A. Human Body Intro

1. Regional and Descriptive Terms that describe the human body
2. Planes of the Body

B. Cells

1. Structures
2. Functions
3. Mitosis

C. Tissues

1. Main types of epithelial tissue
2. Other tissues of the body

D. Integumentary System

1. Skin
2. Appendages

E. Bones and Skeletal System

1. Basic Shapes of Bones
2. Bone Markings

F. The Skeleton

1. Bones of the axial skeleton
2. Bones of the appendicular skeleton

G. Joints

1. Synovial joints
2. Other joints
3. Movements of Joints

H. Muscles and Muscle Tissue

1. Intro
2. Characteristics of Muscle Tissue
3. Related muscle terms

I. Muscular System

1. Major muscles (anterior)
2. Major muscles (posterior)

J. Fundamentals of the Nervous System

1. Neurons
2. Neuroglia

K. Central Nervous System

1. Structures of the Brain
2. Functions

L. Peripheral Nervous System

1. Structures of Eye and Ear
2. Function

REQUIRED TEXTBOOK AND MATERIALS

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

<https://openstax.org/details/books/anatomy-and-physiology?Book%20details>

Supplemental = Textbook - Wikibooks – Human Physiology

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

[Wilk-Blaszczak \(2018\) Human Anatomy Lab Manual \(Free Online\)](#)

[Human-Anatomy-Lab-Manual-1535056958._print.pdf](#)

ATTENDANCE POLICY

Students must log into Blackboard and access this course a **minimum of 3 times a week.**

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process.

If you stop coming to class and fail to drop the course, you will earn an “F” in the course.

The last day for students to drop classes and receive a full refund is January 31, 2024.

The last day for students to drop or withdraw WITHOUT academic penalty is February 16, 2024.

The last day for students to drop or withdraw WITH academic penalty is April 2, 2024.

Week:	To Do:	Due Date:
<p><u>WEEK 1</u></p> <p>INTRODUCTION</p> <p>Jan 16th – 19th</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Discussion Board: Introduction <input type="checkbox"/> Register for McGraw Hill Virtual Labs (Information on Blackboard under “Modules” then <input type="checkbox"/> Syllabus Quiz <input type="checkbox"/> Join a group for Group Lab: Musculoskeletal Disorders (Information on “Modules” page) due 04.19.24 	<p><input type="checkbox"/> 01.21.24</p>
<p><u>WEEK 2</u></p> <p>ANATOMICAL TERMS ELEMENTS, CELLS, TISSUES</p> <p>Jan 22nd – 26th</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Module (1): McGraw Hill Connect Interactive Lab Activities covering Body Orientation, Tests for Macromolecules, and Microscope <input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24 	<p><input type="checkbox"/> 01.28.24</p>
<p><u>WEEK 3</u></p> <p>ELEMENTS, CELLS, TISSUES</p> <p>Jan 29th – Feb 2nd</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Module (1): McGraw Hill Connect Interactive Lab Activities covering Cells and Tissues <input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24 	<p><input type="checkbox"/> 02.04.24</p>
<p><u>WEEK 4</u></p> <p>INTEGUMENTARY SYSTEM</p> <p>Feb 5th – 9th</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Module 2: McGraw Hill Connect Interactive Lab Activities covering Integumentary System <input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24 	<p><input type="checkbox"/> 02.11.24</p>
<p><u>WEEK 5</u></p> <p>SKELETAL SYSTEM & JOINTS</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Module 2: McGraw Hill Connect Interactive Lab Activities covering Skeletal System & Joints 	<p><input type="checkbox"/> 02.18.24</p>

Feb 12 th – 16 th	<input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24	
WEEK 6 SKELETAL SYSTEM & JOINTS Feb 19 th – 23 rd	<input type="checkbox"/> Module 2: McGraw Hill Connect Interactive Lab Activities covering Skeletal System & Joints <input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24	<input type="checkbox"/> 02.25.24
WEEK 7 SKELETAL SYSTEM & JOINTS Feb 26 th – March 1 st	<input type="checkbox"/> Module 2: McGraw Hill Connect Interactive Lab Activities covering Skeletal System & Joints <input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24	<input type="checkbox"/> 03.03.24
WEEK 8 MIDTERM EXAM Mar 4 th – 8 th	<input type="checkbox"/> Midterm Exam Opens 03.06.24 and Closes 03.08.24. <input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24	<input type="checkbox"/> 03.08.24
Mar 11th – 15th Spring Break	<input type="checkbox"/> Sleep, rest, relax <input type="checkbox"/> Enjoy time with family and friends <input type="checkbox"/> Netflix, etc. <input type="checkbox"/> Exercise <input type="checkbox"/> Read a good book <input type="checkbox"/> Do something nice for someone	
WEEK 9 MUSCULAR SYSTEM Mar 18 th – 22 nd	<input type="checkbox"/> Module 2: McGraw Hill Connect Interactive Lab Activities covering Muscular System <input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24	<input type="checkbox"/> 03.24.24
WEEK 10 MUSCULAR SYSTEM Mar 25 th – 29 th	<input type="checkbox"/> Module 2: McGraw Hill Connect Interactive Lab Activities covering Muscular System <input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24	<input type="checkbox"/> 03.30.24
WEEK 11 MUSCULAR SYSTEM April 1 st – 5 th	<input type="checkbox"/> Module 2: McGraw Hill Connect Interactive Lab Activities covering Muscular System <input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24	<input type="checkbox"/> 04.07.24
WEEK 12 NERVOUS SYSTEM April 8 th – 12 th	<input type="checkbox"/> Module 3: McGraw Hill Connect Interactive Lab Activities covering Nervous System <input type="checkbox"/> Work with group members on Group Lab (Musculoskeletal Disorders) due 04.19.24	<input type="checkbox"/> 04.14.24
WEEK 13 NERVOUS SYSTEM April 15 th – 19 th	<input type="checkbox"/> Module 3: McGraw Hill Connect Interactive Lab Activities covering Nervous System <input type="checkbox"/> Due: Group Lab (Musculoskeletal Disorders) due 04.19.24	<input type="checkbox"/> 04.21.24
WEEK 14 NERVOUS SYSTEM	<input type="checkbox"/> Module 3: McGraw Hill Connect Interactive Lab Activities covering Nervous System	<input type="checkbox"/> 04.28.24

April 22 nd – 26 th		
WEEK 15 & 16 REVIEW April 29 th – May 1 st May 2 nd – 8 th	<input type="checkbox"/> Review for Final Exam (Chapters 1 - 16) <input type="checkbox"/> Be sure you are caught up on all assignments. <input type="checkbox"/> FINAL EXAM Opens 05.03.24 and Closes 05.06.24 (Chapters 1 – 16) <input type="checkbox"/> Congratulations! You made it!! Celebrate 😊	<input type="checkbox"/> 05.06.24

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

1. Exams: Midterm (Ch 1-8); Final Exam (Ch 9-16) = 30%
2. Group Project = 20%
3. Assignments (Discussion & Virtual Labs) = 25%
4. Quizzes = 25%

TOTAL = 100%

GRADE SCALE

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

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 Wi-Fi is necessary to maximize the use of online technology and resources.

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 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. <https://www.lit.edu/student-success/starfish>

ADDITIONAL COURSE POLICIES/INFORMATION

1. Cheating of any type will not be tolerated.
2. **Late assignments will not be accepted.** Students will receive a zero for assignments not completed.
3. Internet usage- students are to use proper netiquette when participating in course email, assignment submissions, and online discussions.

Arizona State University = <https://asuonline.asu.edu/newsroom/online-learning-tips/netiquette-online-students/>

Seth Ross = <http://www.albion.com/netiquette/corerules.html>

The University of Texas at El Paso =

<https://www.utep.edu/extendeduniversity/utepconnect/blog/october-2017/10-rules-of-netiquette-for-students.html>