

202510_BIOL_2102_2A1_2B1

CREDIT

Semester Credit hours (Lecture 3 hours, Lab 1 hour)

MODE OF INSTRUCTION

Online

PREREQUISITE/CO-REQUISITE:

Pre-requisite Biol 2101 and 2301

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

Co-requisite Biol 2302

COURSE DESCRIPTION

The lab provides a virtual learning experience for exploration of the human system components and basic physiology. Systems to be studied include endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics).

COURSE OBJECTIVES

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

- Apply appropriate safety and ethical standards.
- Locate and identify anatomical structures.
- Appropriately utilize laboratory equipment such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.
- Work collaboratively to perform experiments.
- Demonstrate the steps involved in the scientific method.
- 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.



**LAMAR INSTITUTE
OF TECHNOLOGY**

INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Connie Grass
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Office Phone: 409-247-4863
Office Location: MPC 217
Office Hours: See Starfish for Available Office Hours-
[Click Here for Starfish](#)

REQUIRED TEXTBOOK AND MATERIALS

REQUIRED = Textbook - OpexStax Anatomy & Physiology Levels I and II – [OpenStax Anatomy & Physiology textbook](#)

Your textbook for this class is available for free online. If you prefer, you can also get a print version at a very low cost.

Your book is available in web view and PDF for free. You can also choose to purchase on iBooks or get a print version via the campus bookstore or from OpenStax on Amazon.com.

You can use whichever formats you want. Web view is recommended -- the responsive design works seamlessly on any device.

If you buy on Amazon, make sure you use the link on your book page on openstax.org so you get the official OpenStax print version.

Anatomy and Physiology from OpenStax, Print ISBN 1938168135, Digital ISBN 1947172042, www.openstax.org/details/anatomy-and-physiology

Supplemental = Textbook - WikiBooks – Human Physiology
https://en.wikibooks.org/wiki/Human_Physiology

ATTENDANCE POLICY

You must log in to Blackboard and access this course a minimum of 3 times per week.

- Cheating of any type will not be tolerated.
- Late assignments will be accepted with a deduction as a late penalty. Students will receive a zero for assignments not completed.
- If you wish to drop this course, you must drop it administratively. If you do not drop you will receive an "F" in the course.

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.

COURSE CALENDAR/WEEKLY CHECKLIST BIOL 2102 – SPRING 2025

Week	ASSIGNMENTS	Due Dates
<p style="text-align: center;">Week 1</p> <p style="text-align: center;">Jan 21st – 24th</p> <p style="text-align: center;">Module 4: ~Introduction ~Endocrine System</p>	<ul style="list-style-type: none"> ☒ Discussion Board: Introduction ☒ Syllabus Quiz ☒ Join a group for Group Project – Pathogen Presentation due 04.23.25 ☒ Complete McGraw Hill Orientation/Introductory Materials 	☒ 01.26.25
<p style="text-align: center;">Week 2</p> <p style="text-align: center;">Jan 27th – 31st</p> <p style="text-align: center;">Module 4: ~Endocrine System</p>	<ul style="list-style-type: none"> ☒ McGraw Hill Labs: Endocrine System <ol style="list-style-type: none"> 1. Endocrine System Overview 2. Effects of Blood Glucose Level ☒ Start working with group members on Group Project – Pathogen Presentation due 04.23.25 	☒ 02.01.25
<p style="text-align: center;">Week 3</p> <p style="text-align: center;">Feb 3rd – 7th</p> <p style="text-align: center;">Module 4 ~Endocrine System</p>	<ul style="list-style-type: none"> ☒ McGraw Hill Labs: Endocrine System <ol style="list-style-type: none"> 3. Thyroid Hormone & Temperature Regulation 4. Endocrine System Lab Quiz ☒ Work with group members on Group Project –due 04.23.25 	☒ 02.09.25
<p style="text-align: center;">Week 4</p> <p style="text-align: center;">Feb 10th – 14th</p> <p style="text-align: center;">Module 4: ~Cardiovascular (Blood & Heart)</p>	<ul style="list-style-type: none"> ☒ MGH Labs: Cardiovascular <ol style="list-style-type: none"> 1. Blood Typing 2. Blood Pressure Overview 3. Blood Pressure Physiology 4. Cardiac Cycle Overview ☒ Work with group members on Group Project – due 04.23.25 	☒ 02.16.25
<p style="text-align: center;">Week 5</p> <p style="text-align: center;">Feb 17th – 21st</p> <p style="text-align: center;">Module 4: ~Cardiovascular (Heart & Blood Vessels)</p>	<ul style="list-style-type: none"> ☒ MGH Labs: Cardiovascular <ol style="list-style-type: none"> 5. Cardiovascular – Heart Auscultation 6. Cardiovascular – Pulse Rate 7. Cardiovascular Quiz ☒ Work with group members on Group Project – Pathogen Presentation due 04.23.25 	☒ 02.23.25
<p style="text-align: center;">Week 6</p> <p style="text-align: center;">Feb 24th – 28th</p> <p style="text-align: center;">Module 5: ~Immune System</p>	<ul style="list-style-type: none"> ☒ MGH Labs: Immune/Lymphatic <ol style="list-style-type: none"> 1. Innate Immunity Overview 2. Adaptive Immunity Overview 3. Differential Blood Cell Count 4. Immune System Quiz ☒ Work with group members on Group Project – Pathogen Presentation due 04.23.25 	☒ 03.02.25
<p style="text-align: center;">Week 7</p> <p style="text-align: center;">March 3rd – 7th</p> <p style="text-align: center;">Module 5: ~Respiratory System</p>	<ul style="list-style-type: none"> ☒ MGH Labs: Respiratory <ol style="list-style-type: none"> 1. Respiratory System Overview 2. Mechanism of Breathing 3. Pulmonary Function Tests 4. Respiratory System Lab Quiz ☒ Work with group members on Group Project – Pathogen Presentation due 04.23.25 	☒ 03.09.25

<p>Week 8</p> <p>Mar 11th – 15th</p> <p>Spring Break</p>	<ul style="list-style-type: none"> ☒ Sleep, rest, relax ☒ Enjoy time with family and friends ☒ Netflix, etc. ☒ Exercise ☒ Read a good book ☒ Do something nice for someone 	
<p>Week 9</p> <p>Mar 17th – 21st</p> <p>~Midterm Exam</p>	<ul style="list-style-type: none"> ☒ MIDTERM EXAM Opens 03.18.25 and Closes 03.19.25 (Chapters 17 – 22) ☒ Work with group members on Group Project – Pathogen Presentation due 04.23.25 	☒ 03.19.25
<p>Week 10</p> <p>Mar 24th – 28th</p> <p>Module 5: ~Digestive System</p>	<ul style="list-style-type: none"> ☒ MH Labs: Digestive and Metabolism 1. Enzymes & Digestion 2. Assignment: Digestive System Work with group members on Group Project – Pathogen Presentation due 04.23.25 	☒ 03.30.25
<p>Week 11</p> <p>Mar 31st – April 4th</p> <p>Module 5: ~Digestive System ~Metabolism</p>	<ul style="list-style-type: none"> ☒ MH Labs: Digestive and Metabolism 3. Digestion Lab Quiz ☒ Work with group members on Group Project – Pathogen Presentation due 04.23.25 	☒ 04.06.25
<p>Week 12</p> <p>April 7th – 11th</p> <p>Module 5: ~Urinary System</p>	<ul style="list-style-type: none"> ☒ MGH LABS: Urinary System 1. Glomerular Filtration 2. Tubular Reabsorption and Secretion →Professional Development Day – April 10th Campus Closed ☒ Work with group members on Group Project – Pathogen Presentation due 04.23.25 	☒ 04.13.25 Campus Closed April 10 th
<p>Week 13</p> <p>April 14th -18th</p> <p>Module 5: ~Urinary System</p>	<ul style="list-style-type: none"> ☒ MGH LABS: Urinary System 1. Urinalysis 2. Urinary System Quiz ☒ DUE SOON →Work with group members on Group Project – Pathogen Presentation due 04.23.25 	☒ 04.20.25
<p>Week 14</p> <p>April 21st – 25th</p> <p>Module 5: Reproductive System (Development & Inheritance)</p>	<ul style="list-style-type: none"> ☒ MGH Labs: Reproductive 1. Development & Inheritance 2. Reproductive System ☒ DUE: Group Project – Pathogen Project 	☒ 04.27.25
<p>Week 15</p>	<ul style="list-style-type: none"> ☒ MGH Labs: Reproductive 3. Reproductive System Quiz 	☒ 05.02.25

April 28 th – May 2 nd		
Module 5: ~Reproductive System (Development & Inheritance)		
Week 16 May 5 th – 9 th Final Exam Review	<input checked="" type="checkbox"/> MGH Labs: Review of Systems 1. Fetal Pig Dissection Part 1 2. Fetal Pig Dissection Part 2	<input checked="" type="checkbox"/> 05.09.25
Week 17 May 12 th – 14 th Final Exam Review Final Exam	FINAL EXAM Opens 05.10.25 and Closes 05.12.25 (Chapters 23 – 28) You made it!! Celebrate 😊	<input checked="" type="checkbox"/> 05.12.25

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- | | |
|---------------------------------|-------|
| 1. Assignments (Lab Activities) | = 25% |
| 3. Quizzes MGH | = 25% |
| 4. Mandatory Group Lab Project | = 20% |
| 5. Midterm and Final Exam | = 30% |

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.

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 AND RECOMMENDATIONS

COURSE REQUIREMENTS

- A Midterm and Final are required with two attempts given per assessment.
- The final score will be an **average of all attempts**.
- Students will complete virtual labs for each chapter.
- Students will complete a group lab project.
- Late assignments will be accepted with a deduction as a late penalty. Students will receive a zero for assignments not completed.

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.