

202410_BIOL_2302_Spring_2024
Course Syllabus
Anatomy & Physiology II
January 6th – May 10th



INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Connie J. Grass, DC, BSHB, BSN
Email: cjgrass@lit.edu
Office Phone: 409-247-4863
Office Location: MPC 217
Office Hours: Monday-Friday 9:00 AM– 11:00 AM
Schedule Appointment: <https://www.lit.edu/student-success/starfish>

Credit: 3 semester credit hours (3 hours lecture)

Mode of Instruction: Online

Prerequisite/Co-requisite: Pre-requisite BIOL 2301. And have passed the Reading/Writing Sections of THEA or any other accepted test. **Co-requisite;** BIOL 2102

Course Description

Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. This course is time-bound, structured, and fully online.

Learning Outcomes

Upon successful completion of this course, students will:

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

Course Objectives

Upon completion of this course, the student will be able to:

1. Use anatomical terminology to identify and describe the 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 the contributions of organs and systems to the maintenance of homeostasis.
5. Identify causes and effects of homeostatic imbalances.
6. Describe 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 an informed conclusion

TEXTBOOK AND MATERIALS:

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

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

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. The 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. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.)

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

Textbook - Wiki books – Human Physiology

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

Attendance Policies

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

2. Cheating of any type will not be tolerated. *This includes copying and pasting information.*
3. Internet usage- students are to use proper netiquette when participating in course email, assignment submissions, and online discussions.
4. Teamwork: To include the ability to connect choices, actions, and consequences to ethical decision-making
6. Personal Responsibility: To include the ability to connect choices, actions and consequences to ethical decision-making.

Course Outline

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|---|--|
| <ul style="list-style-type: none"> A. Endocrine System <ol style="list-style-type: none"> 1. Organs of the endocrine system 2. Functions of the endocrine organs 3. Hormones and target tissues 4. Endocrine disorders B. Blood <ol style="list-style-type: none"> 1. Red Blood Cells 2. White Blood Cells
Platelets and blood clotting 3. Blood Groups and compatibility 4. Diseases C. Heart <ol style="list-style-type: none"> 1. Structure and function 2. Blood flow through the heart 3. Electrical conduction system and ECG interpretation D. Circulatory System <ol style="list-style-type: none"> 1. 3 main types of blood vessels and characteristics of each 2. Learning the anatomy of the major arteries (anterior and posterior) 3. Learning the anatomy of the major veins (anterior and posterior) | <ul style="list-style-type: none"> E. Lymphatic and Immune Systems <ol style="list-style-type: none"> 1. Organs of the lymphatic system 2. Functions of those organs 3. Immunity and disease F. Respiratory System <ol style="list-style-type: none"> 1. Structural anatomy 2. Physiology 3. Diseases G. Digestive System <ol style="list-style-type: none"> 1. Organs and structures 2. Functions of organs 3. Enzymes and the digestive process 4. Diseases H. Nutrition <ol style="list-style-type: none"> 1. Proper nutrition (problems with N. American diet) 2. Metabolism and Krebs's cycle I. Urinary System <ol style="list-style-type: none"> 1. Structural anatomy J. Electrolytes and Fluid Balance <ol style="list-style-type: none"> 1. Fluid 2. Electrolyte balance K. Reproductive System <ol style="list-style-type: none"> 1. Structural anatomy of both male and female 2. Functions 3. Meiosis |
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Weekly Checklist

BIOL 2302 (Lecture) - Spring 2023

WEEK	ASSIGNMENTS	DUE DATES
<p style="text-align: center;">Week 1</p> <p style="text-align: center;">Jan 16th – 19th</p> <p style="text-align: center;">Module 4: ~Introduction ~Endocrine System <u>Total Video Time:</u> 14 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Discussion Board 1: Introduction <input type="checkbox"/> Netiquette Discussion Board <input type="checkbox"/> Syllabus Quiz <input type="checkbox"/> Video Quiz: Endocrine (Chapter 17) <input type="checkbox"/> Read over Individual Project instructions – Organ Poster due <u>03.08.24</u> <input type="checkbox"/> Join a group: Group Project – Body Systems & Disease due 04.12.24 	<ul style="list-style-type: none"> <input type="checkbox"/> 01.19.24 <input type="checkbox"/> 01.21.24 <input type="checkbox"/> 01.21.24
<p style="text-align: center;">Week 2</p> <p style="text-align: center;">Jan 22nd – 26th</p> <p style="text-align: center;">Module 4: ~Endocrine System <u>Total Video Time:</u> 6 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Discussion Board 2: Endocrine <input type="checkbox"/> Video Quiz: Fight or Flight (or Freeze) Response (Chapter 17) <input type="checkbox"/> Start working on Individual Project – Organ Poster due <u>03.08.24</u> <input type="checkbox"/> Start working with group members on Group Project – Body Systems & Disease due 04.12.24 	<ul style="list-style-type: none"> <input type="checkbox"/> 01.26.24
<p style="text-align: center;">Week 3</p> <p style="text-align: center;">Jan 29th – Feb 2nd</p> <p style="text-align: center;">Module 4: ~Cardiovascular (Blood) <u>Total Video Time:</u> 5 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Discussion Board 3: Blood Type <input type="checkbox"/> Video Quiz: Blood (Chapter 18) <input type="checkbox"/> Work on Individual Project – Organ Poster due 03.08.24 <input type="checkbox"/> Work with group members on Group Project – Body Systems & Disease due 04.12.24 	<ul style="list-style-type: none"> <input type="checkbox"/> 02.02.24
<p style="text-align: center;">Week 4</p> <p style="text-align: center;">Feb. 5th – 9th</p> <p style="text-align: center;">Module 4: ~Cardiovascular (Heart) <u>Total Video Time:</u> 4 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Discussion Board 4: Heart <input type="checkbox"/> Video Quiz: Heart (Chapter 19) <input type="checkbox"/> Work on Individual Project – Organ Poster due 03.08.24 <input type="checkbox"/> Work with group members on Group Project – Body Systems & Disease due 04.12.24 	<ul style="list-style-type: none"> <input type="checkbox"/> 02.09.24
<p style="text-align: center;">Week 5</p> <p style="text-align: center;">Feb 12th – 16th</p> <p style="text-align: center;">Module 4: ~Cardiovascular (Blood Vessels) <u>Total Video Time:</u> 10 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Video Quiz: Blood Vessels (Chapter 20) <input type="checkbox"/> QUIZ 1: Chapters 17 – 20 (Endocrine & Cardiovascular) Opens 02.16.24 and Closes 02.18.24 <input type="checkbox"/> Work on Individual Project – Organ Poster due 03.08.24 <input type="checkbox"/> Work with group members on Group Project – Body Systems & Disease due 04.12.24 	<ul style="list-style-type: none"> <input type="checkbox"/> 02.16.24 <input type="checkbox"/> 02.18.24

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<p>Week 6</p> <p>Feb 19th – 23rd</p> <p>Module 5: ~Immune System <u>Total Video Time:</u> 30 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Discussion Board 5: Immune/Lymphatic <input type="checkbox"/> Video Quiz: Immune System (Chapter 21) <input type="checkbox"/> Video Quiz: Immune System (Chapter 21) <input type="checkbox"/> Work on Individual Project – Organ Poster due 03.08.24 <input type="checkbox"/> Work with group members on Group Project – Body Systems & Disease due 04.12.24 	<ul style="list-style-type: none"> <input type="checkbox"/> 02.23.24
<p>Week 7</p> <p>Feb 26th – Mar 1st</p> <p>Module 5: ~Respiratory System <u>Total Video Time:</u> 11 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Discussion Board 6: Respiratory <input type="checkbox"/> Video Quiz: How the Respiratory System Works (Chapter 22) <input type="checkbox"/> Video Quiz: How Oxygen Travels through your Body (Chapter 22) <input type="checkbox"/> QUIZ 2: Chapter 21 (Immune) & Chapter 22 (Respiratory) Opens 03.01.24 and Closes 03.03.24 <input type="checkbox"/> Work on Individual Project – Organ Poster due 03.08.24 <input type="checkbox"/> Work with group members on Group Project – Body Systems & Disease due 04.12.24 	<ul style="list-style-type: none"> <input type="checkbox"/> 03.01.24 <input type="checkbox"/> 03.03.24
<p>Week 8</p> <p>Mar 4th – 8th</p> <p>~Midterm Exam</p>	<ul style="list-style-type: none"> <input type="checkbox"/> MIDTERM EXAM Opens 03.06.24 and Closes 03.08.24 (Chapters 17 – 22) <input type="checkbox"/> DUE: Individual Project – Organ Poster <input type="checkbox"/> Work with group members on Group Project – Body Systems & Disease due 04.12.24 	<ul style="list-style-type: none"> <input type="checkbox"/> 03.08.24
<p>Mar 11th – 15th</p> <p>Spring Break</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Sleep, rest, <u>relax</u> <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 	
<p>Week 9</p> <p>Mar 18th – 22nd</p> <p>Module 5: ~Digestive System <u>Total Video Time:</u> 10 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Discussion Board 7: Digestive <input type="checkbox"/> Video Quiz: Digestive (Chapter 23) <input type="checkbox"/> Work with group members on Group Project – Body Systems & Disease due 04.12.24 	<ul style="list-style-type: none"> <input type="checkbox"/> 03.22.24
<p>Week 10</p> <p>Mar 25th – 29th</p> <p>Module 5: ~Digestive System ~Metabolism <u>Total Video Time:</u> 11 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Video Quiz: Metabolism & Nutrition (Chapter 24) <input type="checkbox"/> QUIZ 3: Chapter 23 (Digestive) & Chapter 24 (Metabolism & Nutrition) Opens 03.29.24 and Closes 03.31.24 <input type="checkbox"/> Work with group members on Group Project – Body Systems & Disease due 04.12.24 	<ul style="list-style-type: none"> <input type="checkbox"/> 03.29.24 <input type="checkbox"/> 03.31.24

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<p>Week 11</p> <p>April 1st – 5th</p> <p>Module 5: ~Urinary System <u>Total Video Time:</u> 7 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Discussion 8: Post your poster and comment on two other <u>posters</u> <input type="checkbox"/> Discussion 9: Urinary <input type="checkbox"/> Video Quiz: Urinary System (Chapter 25) <input type="checkbox"/> DUE SOON → Work with group members on Group Project – Body Systems & Disease due 04.12.24 	<input type="checkbox"/> 04.05.24
<p>Week 12</p> <p>April 8th – 12th</p> <p>Module 5: ~Urinary System <u>Total Video Time:</u> 2 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Video Quiz: Fluids & Electrolytes (Chapter 26) <input type="checkbox"/> QUIZ 4: Chapter 25 (Urinary) & Chapter 26 (Fluids & Electrolytes) Opens 04.12.24 and Closes 04.14.24 <input type="checkbox"/> DUE: Group Project – Body Systems & Diseases due 04.12.24 	<input type="checkbox"/> 04.12.24 <input type="checkbox"/> 04.14.24
<p>Week 13</p> <p>April 15th – 19th</p> <p>Module 6: ~Reproductive System <u>Total Video Time:</u> 16 minutes</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Discussion 10: Reproductive <input type="checkbox"/> Video Quiz: Reproductive (Chapter 27) <input type="checkbox"/> Video Quiz Surprising Effects of Pregnancy (Chapter 27) 	<input type="checkbox"/> 04.19.24
<p>Week 14</p> <p>April 22nd – 26th</p> <p>Module 6: ~Reproductive System (Development & Inheritance)</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Video Quiz: Development & Inheritance (Chapter 28) <input type="checkbox"/> QUIZ 5: Chapter 27 (Reproductive) & Chapter 28 (Development & Inheritance) Opens 04.26.24 and Closes 04.28.24 	<input type="checkbox"/> 04.26.24
<p>Week 15 & 16</p> <p>April 29th – May 3rd May 6th – 8th</p> <p>Final Exam Review ~Final Exam</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Review for Final Exam <input type="checkbox"/> Make up missing <u>assignments</u> <p>FINAL EXAM Opens 05.03.24 and Closes 05.06.24 (Chapters 23 – 28)</p> <p>You made it!! Celebrate ☺</p>	<input type="checkbox"/> Final is due 05.06.24 by 11:59 pm



DROP POLICY – Spring 2024

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 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**.

Grade Scale

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

Course Evaluation

Final grades will be calculated according to the following criteria:

1. Exams (Ch 17 – 21) Final Exam	30%
2. Quizzes	20%
3. Discussions	10%
4. Assignments 9 (Video Quizzes & Project Plan)	20%
5. <u>Projects (Individual & Group)</u>	<u>20%</u>
	100%

Technical Requirements (for courses using Blackboard)

The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at:

https://help.blackboard.com/en-us/Learn/9.1_2014_04/Student/015_Browser_Support/015_Browser_Support_Policy

A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of the online technology and resources.

Disabilities Statement

The Americans with Disability Act of 1990 and Section 504, 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 American with Disability Act of 1990, to students with a diagnosed disability. The Special Populations Office is 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)839-2018. 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 or obtained in print upon request at the Student Services Office.

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. <https://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>

