

BIOL 2302: Human Anatomy and Physiology II

Lecture: 3 Semester Credit Hours

BIOL 2302.101 Monday, Tuesday, Wednesday 7:55-8:45a.m.

BIOL 2102: Human Anatomy and Physiology I Lab

Lab: 1 Semester Credit Hour

BIOL 2102L.101 Thursday, Friday 7:55-8:45a.m.

CLARENDON COLLEGE

Division of Science and Health

Course Syllabus - Spring 2024

Instructor: Mrs. Jody Piper

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Office Hours: M-F 7:45-8:00 a.m. & 3:30-4:00 p.m.

Google Classroom Code: 5izmwti

BIOL 2302 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, urinary (including fluid and electrolyte balance), and reproductive. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

BIOL 2102 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 cardiovascular, immune, lymphatic, respiratory, digestive, urinary, and reproductive.

Statement of Purpose: Human Anatomy and Physiology I partially satisfies the requirements for the Associates Degree at Clarendon College and is designed for transfer to a senior college.

Required Texts: *Anatomy & Physiology* textbook authored and published by OpenStax College (License: CC-BY 4.0). You are responsible for reading the text. You can download the textbook material at <https://openstax.org/details/books/anatomy-and-physiology>. This course also includes additional content created by BNED and other third-party sources under CC-BY 4.0 Attribution License. You do not have to print the textbook as it is available as an e-text within the Barnes and Noble Loud Cloud platform.

ISBN-10: 1938168135

BIOL 2102: Required Text: *Human Anatomy & Physiology Laboratory Manual with MasteringA&P, Cat Version, Update 13 th Edition* by Elaine N. Marieb and Lori A. Smith. ISBN-10: 0134632338

Class lectures will be based on the book chapters, but not all of the material in the text will be covered in class. **You are, nevertheless, responsible for reading the text.** Further, supplemental material may be presented that is not in the book, and thus it is essential that you attend the class regularly.

Supplies:

- **3 ring binder** (at least 1 - 1½ " for your lecture notebook - see sections below). I have some available if you need...just ask!! Lecture notes (that are to be added to and discussed during class) will be given to you at the beginning of the lecture.
 - You are responsible for completing these notes and for keeping them in your 3 ring binder.
 - Your notebook should also include any lecture and/or lab handouts, homework, quizzes, and exams maintained in the appropriate labeled section.

- Notebook section dividers:
 - 1) LECTURE NOTES/HANDOUTS**
 - 2) DAILY WORK/HOMEWORK**
 - 3) QUIZZES**
 - 4) LAB Material**
 - 5) EXAM Reviews**
- ***map pencils (to be used in lab periodically)***
- ***sticky notes – regular size***
- ***ONE of the following: Cleaning Wipes OR Dish Soap OR Hand Soap***

Methods of Instruction: This course will utilize lecture/discussion, computer programs, audio-visual materials, and individualized lab instruction.

Core Objective Statement: In accordance with recommendations from the Texas Higher Education Coordinating Board, all life and physical science courses at Clarendon College will address the following core objectives:

Critical Thinking Skills – including creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

Communication Skills – including effective written, oral, and visual communication.

Empirical and Quantitative Skills – including application of scientific and mathematical concepts.

Teamwork – including the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

Student Learning Outcomes:

Upon successful completion of **Human Anatomy & Physiology II**, the student should demonstrate these core objectives by being able to use:

Critical Thinking Skills

Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.

Communication Skills

Describe the characteristics of life and the basic properties of substances needed for life.

Describe the reasoning processes applied to scientific investigations and thinking.

Describe human physiology and homeostasis as maintained by organ systems.

Empirical and Quantitative Skills

Describe the structure of cell membranes and the movement of molecules across a membrane.

Student Learning Outcomes for Lab: Upon successful completion of Human Anatomy & Physiology I, the student should demonstrate these core objectives by being able to use:

Critical Thinking Skills

Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins

Describe the characteristics of life and the basic properties of substances needed for life.

Describe human physiology and homeostasis as maintained by organ systems.

Communication Skills

Describe the reasoning processes applied to scientific investigations and thinking.

Empirical and Quantitative Skills

Describe the structure of cell membranes and the movement of molecules across a membrane.

Be able to apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.

Teamwork

Communicate effectively the results of investigations.

Use critical thinking and scientific problem-solving to make informed decisions in the laboratory

Academic Integrity and Dishonest Behavior.

Academic Integrity: An Excerpt from Clarendon College's Student Handbook

Failure to comply with lawful direction of a classroom instructor is a disruption for all students enrolled in the class.

Cheating violations include, but are not limited to: (1) obtaining an examination , classroom activity, or laboratory exercise by stealing or collusion; (2) discovering the content of an examination , classroom activity, laboratory exercise, or homework assignment before it is given; (3) using an unauthorized source of information during an examination , classroom activity, laboratory exercise, or homework assignment ; (4) entering an office or building to obtain unfair advantage; (5) taking an examination for another person; (6) completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person; (7) altering grade records; (8) using any unauthorized form of electronic communication device during an examination, classroom activity, or laboratory exercise; (9) Plagiarism. Plagiarism is the using, stating, offering, or reporting as one's own, an idea, expression, or production of another person without proper credit. Disciplinary actions for cheating in a course are at the discretion of the individual instructor. The instructor of that course will file a report with the Dean of Instruction when a student is caught cheating in the course, whether it be a workforce or academic course. The report shall include the course, instructor, student's name, and the type of cheating involved.

Students who are reported as cheating to the Dean of Instruction more than once shall be disciplined by the Dean. The Dean will notify all involved parties within fourteen days of any action taken.

Classroom Conduct

I will show you the respect you deserve as a student. I, in return, expect respectful behavior from you. Because the following actions cause disruption in the classroom and therefore affect the ability of students to learn, I have strict policies concerning them. Disrespectful behavior on your part will result in deductions from your class participation grade and will be subject to disciplinary action. **Disrespectful behavior includes...**

- **Leaving the room during class time without permission.** Plan restroom visits before or after class—not during class. If special needs exist, please make prior arrangements.
- **Sleeping in class.**
- **Talking AND/OR texting or using electronic devices in class.** Class time is not the time to visit with your fellow classmates. Please respect me and others in class.
- **Use of profane or inappropriate gestures and/or language.**
- **Class Policies:**

1. Absences: Please take class attendance seriously. You are here to learn all you can learn, to build a body of knowledge to help you in your career and/or to give you satisfaction in the future. Students who are motivated come to class. **You are responsible for the material covered in class (lecture or lab) even if you are absent due to extracurricular activities.**

*Unexcused absences will count against your class participation grade as discussed in the grading policies.

2. Excused absences: Make-ups for tests will be allowed *only* if absences are excused.

Excused absences can result from...

1. illness on the part of the student
2. severe illness or death in your *immediate* (not extended) family
3. school sanctioned extracurricular events
4. unfavorable weather conditions (pertains to night class)

To be excused, your absence must comply with the situations described in the Student Handbook. You should make every effort to inform me *in advance* of the absence...don't just *assume* I will know you are gone with an extracurricular activity and *expect* that you will be allowed special circumstances...please make every effort to make arrangements.

3. Make-up work: Late or unexcused work will not be accepted.

Students who have excused absences MUST let me know **before** the test is given that we need to schedule a make-up.

4. There will be NO make-up lab practicals. Because these tests involve practical sections, they can't be set up time & again. If you miss one of these tests, you will have to take a significantly harder essay test. The take home message is: PLAN TO ATTEND ON THESE DAYS or make other arrangements with Mrs. Piper.

5. Scholastic Honesty: I adhere to a strict policy regarding academic honesty. Anyone who is dishonest in any way will receive a zero on that assignment or exam with no opportunity to make up the zero. That student, if allowed to remain in the course, will not be allowed to receive any extra credit points from the time of the infraction through the remainder of the course. Note that dishonest behavior includes both the act of copying someone else's work as well as allowing someone to copy your work. Both students are equally guilty and will be equally punished.

6. Electronic Communication/Entertainment Devices/Laptops: Below is an excerpt from Clarendon College Policy 1541. ...*Cell phones, pagers, and other personal electronic devices must be off and out of sight in classrooms, laboratories, the library, study spaces, and other academic settings and during such events as plays, concerts, lectures, and College ceremonies...These electronic devices may be turned on and set on silent mode only with the expressed consent of the instructor...faculty members may have individual policies related to cell phones, pagers, and other personal electronic devices outlined in their syllabi...(that) may include penalties for violation... The use of cell phones, iPods, other electronic communication or entertainment devices, or laptops is prohibited unless you are using them to research material being presented during class. An offense will result in the device being taken up.*

7. Withdrawal: If you decide that you are unable to complete this course or that it will be impossible to complete the course with a passing grade, you may drop the course and receive a "W" on your transcript instead. Withdrawal from a course is a formal procedure that you must initiate. If you do not go through the formal withdrawal procedure, you will receive a grade of "F" on your transcript. A student is permitted to drop a course if he/she obtains an official drop slip from the office and has the instructor sign the slip before the 12th class week.

****Remember, a student is only allowed to drop the same class twice before he/she will be charged up to triple the tuition amount for taking the class a third time or more.**

Furthermore, beginning with the Fall 2007 semester, students in Texas may only drop a total of 6 courses throughout their entire undergraduate career. After the 6, he/she will no longer be able to withdraw from any classes.

*If you think you need to drop this course, please talk to me about it first. There may be something you can do to still pass the course. Don't hurt your chances for a passing grade in the course by not attending labs or taking exams before we have discussed your situation.

The last day to withdraw from this course with a "W" is Thursday, April 11th, 2024.

American with Disabilities Act Statement:

Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, notify the Office of Student Services (806-874-3571 or 800-687-9737). We will work with you to make whatever accommodations we need to make.

Student Rights and Responsibilities are listed on the College website

<http://www.clarendoncollege.edu/Resources/Student%20Services/StudentRightsResponsibilities.pdf>.

Grading Policies: You will receive one **letter** grade for **BIOL 2302**. Your grade will be calculated on a 100 percent scale and will come from five components: class participation & daily work, homework and daily quizzes, your lecture notebook, and lecture exams.

1. Class participation and daily work will count as 10% of your final course grade.

This grade comes from your participation in class discussions and exercises assigned in class.

- a.**If you choose not to participate in class discussions & classwork, you will receive no credit
- b. For every unexcused absence (either to lecture or lab) you will have 5 points deducted from your class participation grade.
- c. **Discussion Posts will be part of your grade. These discussion questions will be posted in the classroom or in the Google Classroom.**

2. Homework (Reviews) will count as 10% of your final course grade.

- a. You will be assigned homework as necessary to **help you prepare for class lectures and/or quizzes**. Sometimes the homework will be checked together as a class and a completion grade will be taken; other times, homework will be graded for an individual grade and/or a quiz will be given to assess the completion of homework and mastering the concepts.
- b. Please realize the importance of completing homework that is assigned. Assignments are not intended to be *busy work*, but to help you get the most out of your reading or studying and to help you understand the material being covered.
- c. **Article Review Forms** will be due twice a six weeks. This homework is required and may be submitted through the Google Classroom.

3. QUIZZES (daily) will count as 15% of your final course grade.

- a. Any day that we take notes in class, you should study for a quiz the next day on material covered. Information covered on quizzes will also appear on exams. Most of these quizzes will be taken in your Google Classroom.
- b. I will drop the lowest quiz grade each six weeks.

4. ARTICLE REVIEWS/Responses will count as 5% of your final course grade.

- a. You will be assigned an Article Review each six weeks.
- b. You are responsible for completing these reviews according to the guidelines posted.
- c. You will also respond, using the guidelines posted, to at least TWO other Article Reviews posted from other people in the classroom.
- d. These Article Reviews are to come from scientific journals or approved health/medical sources and you MUST cite your source for full credit. Plagiarism will not be tolerated and papers that utilize plagiarism will receive a ZERO for this portion of your grade.

5. Lecture exams will count as 60% of your final course grade.

- a. All lecture tests, including the final, will be weighted equally.
- b. Each test covers the material covered since the last test (not comprehensive).
- c. The tests will utilize a variety of question formats (objective, matching, multiple choice, true/false, etc.)

d. You may be asked to take some of these exams in your Google Classroom.

You will also receive one **letter grade** for **BIOL 2101 (A&P Lab)**. Your grade will be calculated on a 100 percent scale and will come from three components: class participation & daily work, homework, and lab practical exams.

1. LAB participation and daily work will count as 15% of your final course grade.

- a. This grade comes from your participation in class discussions and exercises assigned in class.
**If you choose not to participate in lab discussions & classwork, you will receive no credit.
- b. For every unexcused absence you will have 5 points deducted from your class participation grade.

2. Homework (Reviews) will count as 10% of your final course grade.

- a. You will be assigned homework as necessary to **help you prepare for lab practicals**. Sometimes the homework will be checked together as a class and a completion grade will be taken; other times, homework will be graded for an individual grade and/or a quiz will be given to assess the completion of homework and mastering the concepts.
- b. Please realize the importance of completing homework that is assigned. Assignments are not intended to be *busy work*, but to help you get the most out of your reading or studying and to help you understand the material being covered.
- c. Lab Report Forms will be submitted weekly for a homework grade. These forms may be submitted through Google Classroom.

3. Lab Practical will count as 75% of your final course grade.

- a. Four lab practicals will be given.
- b. Each practical will be weighted equally.
- c. Each test covers the material covered since the last practical (not comprehensive).
- d. The practicals will involve ...
 - i. identification of human anatomy in diagrams, models, and mannequins.
 - ii. They will also involve identification of histology slides.
 - iii. Students will also answer questions on human physiology as discussed in lab

Grading Scale for the course:

89.5% - 100%	A
79.5% - 89.4%	B
69.5% - 79.4%	C
59.5% - 69.4%	D
59.4% and below	F

For the high school grade the lecture and lab will be combined:

LECTURE EXAMS: 50%

LAB PRACTICALS: 20%

PARTICIPATION (DAILY WORK): 10%

HOMEWORK/DAILY QUIZZES: 15%

ARTICLE REVIEWS: 5%

Clarendon College/Childress High School

BIOL 2302: Human Anatomy & Physiology II Class Contract

I, _____, have read the syllabus for BIOL 2302 Human Anatomy & Physiology II taught during the SPRING 2024 semester by Jody Piper and agree to abide by the policies written in it. I understand the policies of class attendance, lab attendance, dropping the course, academic honesty, and general class behavior and understand the consequences of failing to comply with these policies.

Student Signature Date: _____

HUMAN A&P 2 and LAB Schedule (WEEKLY schedule posted in Google Classroom):

*Quizzes aren't guaranteed, but be prepared for a quiz from material covered at DAILY lecture.

Week of:	Lecture Topics	Student Learning Outcome	Lab Activities	Student Learning Outcome
JAN. 8th	Syllabus A&P II & Introduction Ch. 17: The Endocrine System *DAILY QUIZZES	<i>Explain contribution of organs and systems to the maintenance of homeostasis</i>	No A&P LABS this week	
JAN. 15th	Ch. 17: The Endocrine System *DAILY QUIZZES Begin Ch. 18 Blood **Handout Exam I Review	<i>Explain contribution of organs and systems to the maintenance of homeostasis</i>	Exercise 29: Blood Physiology & Histology **Blood Typing Simulation LAB	<i>Be able to apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipmt to collect and analyze data.</i>
JAN. 22nd	Chapter 18: The Cardiovascular System: Blood *DAILY QUIZZES	<i>Describe modern technology and tools used to study anatomy & physiology</i>	*Heart Diagram	<i>Describe the reasoning processes applied to scientific investigations and thinking.</i>
JAN. 29th	MONDAY - EXAM I Endocrine & Blood Chapter 19: The Cardiovascular System: The Heart *DAILY QUIZZES	<i>Describe human physiology and homeostasis maintained by organ systems.</i>	Exercise 30: Anatomy of the Heart Dissection Mammalian Heart	
FEB. 5th	Chapter 19: The Cardiovascular System: The Heart *DAILY QUIZZES **Handout Exam II Review	<i>Describe human physiology and homeostasis maintained by organ systems.</i>	Exercise 33: Human Cardiovascular Physiology – Blood Pressure and Pulse Determination	
FEB. 12th	Chapter 20: The Cardiovascular System: Blood Vessels and Circulation Introduction	*DAILY QUIZZES	*Lab Review LAB PRACTICAL #1 (Cardiovascular System)	Apply appropriate safety and ethical standards.

FEB. 19th	Chapter 20: The Cardiovascular System: Blood Vessels and Circulation Introduction		Cat Dissection (Skinning if necessary) Exercise 1: Muscle identification	Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.
FEB. 26th	Exam II (Heart & Blood Vessels) Chapter 21: The Lymphatic and Immune System *DAILY QUIZZES **Exam III Review handout		Cat Dissection Exercise 1: Muscle identification	Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, physiology data acquisition systems, and virtual simulations.
MAR. 4th	Chapter 21: The Lymphatic and Immune System *DAILY QUIZZES	<i>Describe the reasoning processes applied to scientific investigation & thinking.</i>	Cat Dissection Exercises 2 & 3: Spinal nerves & endocrine organs Dissection Exercises 4 & 6: Blood vessels & respiratory system *****	Work collaboratively to perform experiments.

MAR. 11th	SPRING BREAK!!		SPRING BREAK!!	
MAR. 18th	Complete Immune System *Exam III (Lymphatic & Immune)		Cat Dissection Exercises 7, 8, & Dig, Urinary, Reprod systems FINISH & REVIEW Cat Dissection	
MAR. 25th	Chapter 22: The Respiratory System *DAILY QUIZZES	<i>Describe human physiology and homeostasis maintained by organ systems.</i>	LAB PRACTICAL #2 (CAT PRACTICAL) Exercise 36 & 37: Anatomy & Histology of the Respiratory System *Respiratory System Physiology	<i>Describe the reasoning processes applied to scientific investigations and thinking.</i>

APR 1st	Chapter 22: The Respiratory System *DAILY QUIZZES **Exam IV Review Handout		Exercise 38: Anatomy & Histology of the Digestive System	<i>Be able to apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.</i>
APR. 8th	Chapter 23: The Digestive System *DAILY QUIZZES	Thursday, April 14th – last day to drop with "W" on transcript	Review LAB PRACTICAL #3 (Respiratory & Digestive)	Locate and identify anatomical structures.
APR. 15th	Chapter 23: The Digestive System *DAILY QUIZZES EXAM IV - Respiratory & Digestive		Exercise 40: Anatomy & Histology of the Urinary System	
APR. 22nd	EXAM IV - Respiratory & Digestive Chapter 25: The Urinary System *DAILY QUIZZES	Use anatomical terminology to identify and describe locations of major organs of each system covered.	Exercise 42: Anatomy & Histology of the Reproductive System	Locate and identify anatomical structures.
APR. 29th	*Final Exam Review Handout Ch. 27: The Reproductive System	Use anatomical terminology to identify and describe locations of major organs of each system covered.	LAB PRACTICAL #4 - Urinary & Reproductive Systems	Locate and identify anatomical structures.
MAY 6th	Finish Notes & FINAL EXAM (Urinary & Reproductive)	Use terminology to identify and describe locations of major organs		