

# **BIOL 2302: Human Anatomy and Physiology II**

**Tuesday** 1:00 p.m. – 4:50 p.m. MKBC 205

Lecture: 3 Semester Credit Hours

# **BIOL 2102: Human Anatomy and Physiology II Lab**

**Tuesday** 5:00 pm – 6:20pm MKBC 202

Lab: 1 Semester Credit Hours

CLARENDON COLLEGE  
Division of Science and Health  
Course Syllabus  
Fall 2023

**Instructor:** Dr. Edward Caraway

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**Office Hours:** **Pampa**

Monday 8:00 am – Noon

Tuesday, Wednesday, & Thursday 3:30pm – 5:00pm

Other office hours by appointment.

Covid information can be found - <https://www.clarendoncollege.edu/CoronavirusUpdate>

**Course Description:** This course is a continuation of BIOL 2401: Study of the structure and function of human anatomy. BIOL 2402 will include the study of endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems.

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

## **Required Texts:**

Good news: 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. (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](http://www.openstax.org/details/anatomy-and-physiology)

***Human Anatomy & Physiology Laboratory Manual Cat Version 11<sup>th</sup> Edition by Elaine N. Marieb and Susan Mitchell (this lab manual will be used during the labs).***

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:** Textbook, Lab manual, composition book, pencils, and latex or vinyl gloves.

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

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

**Critical Thinking Skills**

- Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
- Identify the substrates, products, and important chemical pathways in respiration.

**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 II, the student should demonstrate these core objectives by being able to...

**Critical Thinking Skills**

- Identify the substrates, products, and important chemical pathways in respiration.
- 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.

**Grading Policies:** You will receive one letter grade for BIOL 2302 (3 hours) and one letter grade for BIOL 2102 (1 hour). That grade comes from four components: class participation, your lecture notebook, lecture exams, and a laboratory grade.

BIOL 2302 Lecture grading:

1. **Class participation will count as 15%** of your final course grade.
  - a. This grade comes from your participation in class discussions and exercises.
    - i. If you choose not to participate in class discussions, you will receive no credit.
  - b. For every three unexcused absences (either to lecture or lab) you will have 10 points deducted from your class participation grade.
    - i. If you leave during class, you will receive an unexcused absence.
    - ii. If you arrive late to class, you will receive an unexcused absence.
    - iii. If you are asked to leave class due to disrespectful behavior, you will receive an unexcused absence.
2. **Pop Quizzes will count as 20%** of your final course grade.
  - a. Students will be given quizzes that will include information from the previous lecture and topics from the assigned reading.
3. **Lecture exams will count as 60%** of your final course grade.
  - a. Students will not be allowed to take exams until they have signed a course contract.
  - b. All lecture tests, including the final, will be weighted equally.
  - c. Each test covers the material covered since the last test (not comprehensive).
  - d. The tests will utilize a variety of question formats (objective, matching, multiple choice, true/false, etc.)
  - e. I will drop your lowest lecture test grade, excluding the final which must be counted.
  - f. You will take these exams in Moodle

BIOL 2102 Lab grading:

1. **Class participation will count as 15%** of your final lab grade.
  - a. This grade comes from your participation in lab discussions and exercises.
    - i. If you choose not to participate in lab discussions, you won't receive any credit.
  - b. For every unexcused absence you will have 5 points deducted from your class participation grade.
    - i. If you leave during lab, you will receive an unexcused absence.
    - ii. If you arrive late to lab, you will receive an unexcused absence.
  - c. If you are asked to lab class due to disrespectful behavior, you will receive an unexcused absence.
2. **Lab quizzes will count as 45%** of your final lab grade.
  - a. Short quizzes will be given each week during the first 15 minutes of lab.
  - b. If you come too late to lab, you will receive a zero on that quiz.
  - c. The weekly quizzes will mostly cover the material from the previous lab, but will include at least 1 question about this week's lab. Please read ahead and come to lab prepared.
  - d. At the end of the semester, I will drop your lowest 2 weekly lab quizzes.
3. **Lab practicals will count as 40%** of your final lab grade.
  1. You will take 3 practical exams noted on the syllabus.
  2. These exams are equally weighted and non-comprehensive.

**Grading Scale for the course:**

|            |   |
|------------|---|
| 90% - 100% | A |
| 80% - 90%  | B |

|               |   |
|---------------|---|
| 70% - 80%     | C |
| 60% - 70%     | D |
| 50% and below | F |

### **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 Students 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 Students 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.

#### **Disrespectful behavior includes...**

- **Arriving late.**
- **Leaving the room during class time.** Plan restroom visits before or after class—not during class. If special needs exist, please make prior arrangements.
- **Using electronic communication devices.** This includes cell phones, pagers, iPods etc. These are not allowed during class time. If special needs exist, please make prior arrangements.
- **Sleeping in class.**
- **Talking in class.** Class time is not the time to visit with your fellow classmates. If you do, I will ask you to leave the classroom.
- **Using headphones.** If you do, I will ask you to leave the classroom.
- **I do NOT allow abusive, obscene, or offensive clothing, jokes, or behavior.**

### **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.*** *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. college sanctioned extracurricular events
4. unfavorable weather conditions that prevent students from reaching the college

If you wish for your absence to be excused, you should telephone or e-mail me *in advance* of the absence (leave a message if necessary). Even in emergencies, it usually is possible for you to get word to me about an absence. When you return, you must furnish proof of the reason for your absence if you wish for it to be excused.

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. In most cases, the tests must be taken PRIOR to the absence in order to receive full credit. \*\*If you take the test after it has been given to the class, you will receive a 10% penalty per school day that passes until you take the make-up.\*\* To avoid the penalty, MAKE SURE YOU TAKE A MAKE-UP TEST BEFORE YOU LEAVE.
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 THESE PRACTICALS!
5. **Final Exams:** Students must take a final for each of their academic courses. The schedule of final exam times is published at the beginning of the semester. Do not make plans to leave school before your scheduled final exam. I will not give any early finals except in extreme emergencies after students have provided documentation of said emergency.
6. **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 and may be dropped from the course with a grade of F. 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. Furthermore, that student will not be allowed to drop their lowest quiz grade or exam grade. A second act of dishonesty will result in an F for 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.
7. **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 have made prior arrangements with the instructor. An offense will result in the device being taken up.
8. **Accommodations:** Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, it is your responsibility to notify the Office of Student Services (806-874-3571 or 800-687-9737). We will then work with you to make whatever accommodations we need to make.
9. **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 12<sup>th</sup> 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 with me about it first. It is possible that there is 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 Friday, November 3, 2023.**

## Human Anatomy & Physiology II: Course Calendar and Outline

The essence of life is change and so too this syllabus. As situations in the classroom and laboratory arise, modifications may have to be made, particularly regarding the course calendar. All attempts will be made to keep these changes to a minimum.

| DAY OF  | LECTURE TOPICS                                                                                                                                      | LAB ACTIVITIES                                                                                                                 |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Aug 21  | Welcome to Class, Syllabus, Introduction to Student Portal, and First Assignment<br><br>Course Contracts Due<br>Studying and Test-taking Strategies | <b>No labs this week</b>                                                                                                       |
| Aug 28  | The Endocrine System                                                                                                                                | Exercise 33A: Human Cardiovascular Physiology – Blood Pressure and Pulse Determination                                         |
| Sept 4  | Blood                                                                                                                                               | Exercise 30: Anatomy of the Heart<br>Dissection of Sheep Heart                                                                 |
| Sept 11 | <b>EXAM 1</b>                                                                                                                                       | <b>Lab Practical 1</b>                                                                                                         |
| Sept 18 | The Cardiovascular System: The Heart                                                                                                                | Dissection Exercise 1: Skinning<br>Dissection Exercise 1: Muscle identification                                                |
| Sept 25 | The Cardiovascular System: Blood Vessels                                                                                                            | Dissection Exercises 2 & 3: Spinal nerves & endocrine organs<br>Dissection Exercises 4 & 6: Blood vessels & respiratory system |
| Oct 2   | <b>EXAM 2</b>                                                                                                                                       | Dissection Exercises 7, 8, & 9: Digestive, urinary, & reproductive systems                                                     |
| Oct 9   | The Lymphatic System                                                                                                                                | <b>Lab Practical 2</b>                                                                                                         |
| Oct 16  | The Immune System                                                                                                                                   | Exercise 36: Anatomy of the Respiratory System<br>Exercise 37A: Respiratory System Physiology                                  |
| Oct 23  | <b>EXAM 3</b>                                                                                                                                       | Exercise 38: Anatomy of the Digestive System                                                                                   |
| Oct 31  | The Respiratory System                                                                                                                              | <b>Lab Practical 3</b>                                                                                                         |
| Nov 6   | The Digestive System                                                                                                                                | Exercise 40: Anatomy of the Urinary System<br>Exercise 42: Anatomy of the Reproductive System                                  |
| Nov 13  | The Urinary System                                                                                                                                  | <b>Lab Practical 4</b>                                                                                                         |
|         |                                                                                                                                                     |                                                                                                                                |
| Dec 4   | <b>FINAL EXAM at 1:30 PM</b>                                                                                                                        |                                                                                                                                |
|         |                                                                                                                                                     |                                                                                                                                |