

1408/1108 - Human Biology
Mr. Carrell - ccarrell@llanoisd.org -

Course Description:

In this course, we will investigate how the human body works and see some of the common ways in which the operation of its major systems can be impaired. We will also explore how knowledge of human biology has been obtained through the scientific process. This is a course designed for students who are not biology majors or minors!

The objectives of this course focus on describing, explaining, and predicting natural biological phenomena using the scientific method. The goal of this course is for you to gain an understanding of the interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.

Substance, Labs, and Important Dates

Unit	Unit Name	Chapter(s)	Days Covered	Labs Involved	Quiz/Exam Date (Tentative)
1a	Scientific Method	1	2	1	8/17 (quiz #1)
1b	Chemistry of Life	2	8	1	8/27 (quiz #2)
1c	Cells: Org of the Body	3	7	2	9/9-10 (unit 1 exam)
2a	Digestion/Nutrition	9	6	1	9/21 (quiz #3)
2b	Circulation/Vessels	5	5		9/29-9/30 (midterm exam)
Lab Practical #1					10/5
3a	Blood	6	4		10/15 (quiz #4)
3b	Lymphatic System/ Immunity	7	5		10/25 (quiz #5)
3c	Infectious Disease	8	4	1	11/1 (poster due)
Unit 3 Exam					11/4-5
4a	Respiration	10	6	1	11/16 (quiz #6)
5a	Human Reproduction	17	4		12/3 (quiz #7)
	ASU	SEMESTER		Final	12/6-10 (final exam)
	LLANO	SEMESTER		Final	12/13-17 (final exam)

The class will be conducted at the college level and students are expected to work accordingly. Students will be expected to come to class both prepared and on time. **The overall success of the program depends mostly on each student meeting their individual responsibilities.** Much of this course will be covered in the classroom, but much of it will be covered independently by each student. Allowances should be made for **substantial** study time.

Textbook

Mader, S. S. and M. Windelspecht. 2018. Human Biology. 15th edition, McGraw-Hill, NY, NY.

<https://www.amazon.com/Human-Biology-Sylvia-Mader-Dr/dp/1259689794>

Laboratory

Since we only have 45 minutes per class per day we will be conducting labs over the course of ideally one but up to 3 days. Due to the unpredictable nature of science labs, there may be occasions where you will be asked to remain after class to finish a lab or to clean up a lab, etc. My hopes are that this will be rare. Again, this is a college course and therefore is heavily influenced and weighted by the labs. 100% participation in all labs is both expected and required.

For each lab, students will be required to analyze data and conduct a concise write-up of background, methods, materials, data collection, and conclusions made from analyzing the data. After a lab is done and questions are answered, we will be reviewing what we learned and the overall lesson learned and purpose of each lab. Toward the end of the year, students will be expected to complete full lab write-ups.

Class Supplies

All students should maintain an orderly notebook organized as you wish. At a minimum please obtain the following by the first full week of school:

- Notebook paper
- 2-inch three-ring binder
- 1 box of nitrile gloves (your size)
- Clorox wipes

Grading

Grading is approximate as follows:

	Minor 40%			
Major 60%	Quizzes 20%	Lab 10%	Homework 5%	Classwork 5%

Corrections

All failing grades that are turned in on time can be corrected for an improved grade. Assignments turned in late are not eligible for corrections. To correct a minor grade you must first fill out a minor grade correction form and plan a meeting with Mr. Carrell. Major grade corrections will be assigned in class.

Common Complaints

I included this little section to mention a couple of the common pitfalls of dual credit classes. READ THE BOOK. There is **no substitute** for sitting down, turning off the radio/TV, turning up the lights, turning off the computer, shutting off your cell phone and reading. Showing up for tests thinking you'll just "wing it" will result in **failure, guaranteed**.

There will be students in a million clubs/sports that score the highest in class or on the exams despite their hectic schedule, and there will be students with zero clubs/sports that will get a failing grade. ***The choice seems to lie within you somewhere. No one can prepare you for this class and exams better than yourself.***

Common traits of high performing students: Organized, reading ahead, answering questions in class, positive outlook, focusing on work at hand.

Common traits of poorly performing students: Disorganized, never reading chapters, no homework is done, dead quiet in class discussions. Not doing homework, participating, labs, or blowing off quizzes doesn't just take away the 20%. It affects the entire grade because you chose not to learn the material.

****Cell Phones****

As a classroom rule, students will be required to turn in their phones to me as they enter the classroom. I will lock and store away their phones. Failure to comply will result in an office referral. During labs, one student per group will be allowed to have their phone in order to photograph the steps of the lab if they wish to include them in their lab write up. The only other time students should have their phone is if I directly specify we are going to use them. **I reserve the right to revoke the privilege to use your phone during lab or other activities if you are found using it for anything other than working on the lab or assignment at hand.**

Discipline

Acting out in class, unsafe laboratory behavior, bullying, disrespectful language, and misbehavior, in general, will result in swift repercussions. I will ask you **once** to cease the behavior. Any subsequent issues will be given an office referral. No exceptions or excuses.

Contact

The easiest way to contact me will be through email: ccarrell@llanoisd.org or stopping by my room. I will try to respond the same day but delays may occur depending on circumstances at the time. I understand the difficulty of this course and that everyone learns differently. Even if you just need encouragement, stop by my room and we'll talk through it.

University Policy

Academic Honesty and the ASU Honor Code

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code and the ASU policies on academic dishonesty, which is contained in both print and web versions of the Student Handbook. The penalty for ANY act of dishonesty in this class, including any form of cheating or plagiarism: 1) is a grade of ZERO on the assignment and, 2) disciplinary action as warranted in accordance with university guidelines. Please do NOT jeopardize your career; it's not worth it.

Accommodations for students with disabilities

All students at Angelo State must have the capacity to undertake, with reasonable assistance from the faculty and administration, the academic challenges necessary to fulfill the academic requirements for the degree for certification programs that they are pursuing. If you have a disability and need special accommodations of any nature, you should contact the Student Life Office (Garden Level, University Center, (325) 942-2191 or Student.Life@angelo.edu). I will be happy to make accommodations for you based on the recommendations from the Student Life Office. Please make your request early in the semester to allow time for appropriate arrangements.

Religious Holy Day

A student who intends to observe a religious holy day during the semester should make that intention known in writing to the instructor during the first week of the semester and one week prior to the absence. If this submission is completed, a student who is absent from classes for the observance of a religious holy day shall be allowed to take makeup, missed exams or assignments scheduled for that day in accordance with syllabus policy.

Title IX

Angelo State University is committed to the safety and security of all students. If you or someone you know experience sexual harassment, sexual assault, domestic or dating violence, stalking, or discrimination, you may contact ASU's Title IX Coordinator.

Human Biology Laboratory Safety Contract

1. The science laboratory can provide you with an exciting opportunity to do science. However, remember at all times that a laboratory is a place for serious work. Fooling around or disruptive behavior can result in removal from the laboratory.
2. Always prepare for an experiment by reading the directions in the manual before you come to the laboratory. Follow the directions carefully and intelligently, noting all precautions. Do not add to, omit, or change any of the directions unless your teacher instructs you to do so.
3. Do only the experiments assigned or approved by your instructor. Unauthorized experiments are prohibited.
4. When working with corrosive materials, chemical splash goggles, gloves, and lab aprons must be worn throughout the lab period until all your classmates have completed the lab and the chemicals are safely stored. When the teacher's protective equipment is on, your protective equipment is on. When the teacher takes off his or her protective equipment, you can take off your protective equipment.
5. Do not touch chemicals with your hands.
6. Never taste a chemical or solution. No food or drink is allowed in the laboratory. You may have a drink with a lid at your desk, NOT YOUR LAB TABLE.
7. When observing the odor of a substance, do not hold your face directly over the container. To observe safely, fan a little of the vapor toward you by sweeping your hand over the top of the container.
8. Allow ample time for the hot glass to cool. Remember that hot glass looks the same as cool glass.
9. Know the location of the blanket station, emergency shower, eyewash, and the fire exit procedure. Know the location of the material safety data sheet (MSDS) notebook for reference in the event of an accident.
10. Know the location of your school's MSDS. MSDS information must be shared with students by the instructor or read by students, specifically those sections detailing handling precautions, disposal techniques, and other pertinent information for each chemical.
11. Report any accident, even a minor injury, to your instructor.
12. Discard all waste from lab activities into a chemical waste jar or other location specified by the teacher in accordance with MSDS instructions.

13. Read the label on any chemical bottle you are planning to use in a lab to verify that it contains the correct chemical. Do not use any chemicals stored in unlabeled bottles.
14. Never return unused chemicals to the stock bottle. Do not put any object into a reagent bottle except the dropper with which it may be equipped.
15. Keep your apparatus and work area organized. Avoid spillage, but if you do spill something, notify the teacher and clean up the spill immediately using the appropriate technique.
16. During clean-up time, attend to your assigned area duties. All duties must be completed before leaving the laboratory. Wash hands thoroughly with soap at the conclusion of each lab.
17. Respect your equipment and fellow laboratory workers.
18. You are not allowed to work in a laboratory unless an instructor is present. All student experiments are to be done under the direct supervision of an instructor. Students completing science project assignments at home must complete a permission form before any work is begun, and a parent or guardian must sign the form.
19. Open-toed shoes/sandals, loose-fitting clothing, and jewelry are not permitted during laboratory activities. Long hair must be tied back securely during laboratory activities.
20. Books and notebooks are to be stored on your desk for clear aisles and exiting. Backpacks need to be placed in your chair at your desk. No backpacks are allowed in the lab side of the room.
21. Science department regulation and State statutes require that all students, teachers, and visitors in the laboratory must wear chemical splash goggles during work periods, including clean-up time.
22. One student per lab group may be the designated photographer and have their phone during labs. Phones are to be locked and stored unless your instructor gives you permission to have them.

Science department policy and state statute

Any person who is working, teaching, observing, supervising, assisting or engaging in any work, activity or study in a public or private elementary or secondary school laboratory or workshop where the process used tends to damage the eyes or where protective devices can reduce the risk of injury to the eyes concomitant with such activity shall wear an eye-protective device of industrial quality in the manner in which such device was intended to be worn. When in doubt, wear chemical splash goggles.

In order to maintain a safe working environment for all occupants, teachers are required by the school administrator to remove from the classroom any student out of compliance. This is for your own protection and fellow students.

Sign below to signify that you have read, understand and agree to abide by the guidelines for this classroom.

Parent/guardian please complete the following:

Student Name: _____

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Student Signature: _____

Preferred/Guardian Name: _____

Parent/Guardian Signature: _____

Best method to contact parent/guardian (provide either email, phone, or both):

I have read the attached safety rules and have been present when they were discussed in class or I discussed them directly with my science teacher.

Yes, I wear contact lenses.

I have allergies/sensitivities to:

I have read and discussed the laboratory safety rules with my child.

Parent signature _____

Date _____