Biology 5: Human Biology

Fall 2022

Reedley College

Class No: 50041	**Class Format:** Fully online
Units (Hours): 4 (3 Lec, 3 Lab)	**Instructor:** Sara Blake
Meeting Time: Lecture: Tue 6:30-9:20 Lab: Thu 6:30-9:20	**Email:** sara.blake@reedleycollege.edu
Location: LFS 11	**Office Hours:** Wednesday 9:00-11:00
Website: https://scccd.instructure.com Log in with your SCCCD credentials	**Office Location:** https://cccconfer.zoom.us/j/94744652711

Course Description

Advisories: English 1A Mathematics 201.

This course is an introductory human biology course that examines science and societal issues. This course emphasizes the structure of the human body and the functional interrelationships of the body's systems: integument, circulatory, digestive, respiratory, urinary, skeletal, muscular, nervous, endocrine, reproductive, and genetics. (A, CSA-GE, UC, I)

Textbooks

Both the Lecture textbook and the Lab manual are available free of charge. The lecture text is found below, but it is also broken down by chapter and section directly in our Canvas Modules. You will be responsible for all the content that I have posted to Canvas.

The Lab manual is also available in our Modules, as a weekly pdf download. I highly encourage you bring a laptop or tablet to our lab meetings if you do not plan to print out the materials beforehand. It is YOUR RESPONSIBILITY to come to both lecture and lab prepared with the content assigned.

Lecture Text:
https://bio.libretexts.org/Bookshelves/Human_Biology/Book%3A_Human_Biology_(Wakim_and_Grewal)

Course Structure

Biol 5 is being held entirely in person this semester. Our Tuesday lectures are our one chance to cover the textbook materials. This is a LONG time to sit and listen to a lecture, so we will try to take quick breaks and time for Q&A every 30-45 minutes.

Our Thursday Labs will be in the same place and at the same time so we will get comfortable in the LFS 11 room. Labs will be more hands-on and experiment based. This means that as you work through the activities in the lab manual, some people may take longer than others. This is ok! Take the time that you need to learn the material and remember I am always around to help.

The Lab Reports (the downloads that you followed and filled in on Lab days) will be due as Canvas uploads on Fridays at midnight. This gives you a little extra time if you did not quite finish up the concept questions at the end of the lab.

Communication

As a course with online components, it is important to be conscious of the difference in communication styles. When representing yourself online you must identify yourself by your real name. Be mindful of your word choice and avoid sharing personal information in online discussions.

Student Learning Objectives

1. Demonstrate knowledge regarding the process of science and society, microscopy, and the cell
2. Identify human body levels of organization and homeostatic mechanisms
3. Demonstrate knowledge of the chemical basis of life
4. Evaluate scientific literature and current biological achievements

5. Apply the principles of genetics to humans and understand the outcome of normal and abnormal DNA
6. Describe the basic cellular, molecular and gross anatomy of tissues, organs and organ systems and explain the basic function of those tissues and organs that relate to the integument, circulation, digestive, respiratory, urinary, skeletal, muscular, nervous, endocrine, reproduction, genetics, and evolution
7. Identify and recall fundamental structures from anatomical models and slides using correct nomenclature and language

Grading

Your grade will be determined by calculating the amount of points you earned divided by the total points available in the course. Do not hesitate to email me if you notice a mistake in your online grades, however emails regarding extra credit opportunities or requests to give you a higher grade will not be entertained. Letter grades are distributed on the following scale:

PERCENT	GRADE
90 – 100	A
80 – 89.99	B
70 – 79.99	C
60 – 69.99	D
0 – 59.99	F

The point breakdown for this course (as it sits now) is as follows:

TASK	POINTS
Lecture Exams (4 x 50pts)	200
Final Exam	150
Write Ups (5 x 10pts)	50
Lab Reports (14 x 15pts)	210
Case Study Presentation	50
Lab Practical (1 x 25pts; 2 x 50pts)	125
Total Available	**785**

Significant Assignments

Lecture Exams: Completed on **Canvas** during class on the days designated in the schedule. The 4 lecture exams will contain ONLY the material that we have covered since the previous exam. The Final will be in the same format but it is comprehensive. You will need to bring your laptop or tablet or smartphone to take the exams!

Write Ups: Throughout the semester you will have opportunities to select your assignments. These writeups should be equivalent to a short paper (think 500-700 words, but this is not a hard requirement)

and will be posted into discussion boards so that you and your fellow students will be able to use different perspectives to study for the Exams.

I currently have 8 writeup topics through the semester, only your top 5 will be graded! If you only do 5 this will not affect your grade!

Lab Reports: These are the grade parts of the Labs, where you write up your results or conclusions and illustrations of the important cells and structures that we cover that day. Since we are in an age of pocket technology, if you are uncomfortable hand-illustrating our microscope findings you are welcome to take photos with a phone and embed them in your reports.

Case Study Presentation: Details will be provided **on Canvas** during the week of the first Exam. Small groups (3-4 students each) will be responsible for a presentation or project on a case study. Each group of students will be assigned a patient with a disease and will submit an essay on the disease, diagnosis, treatment, and prognosis. The final Lab will be dedicated to a presentation of this material to your classmates.

Lab Practicals: The 3 lab exams will be held **in class** and use photos and illustrations of models, slides, diagrams, and experimental setups. Questions will be a combination of multiple choice, short answer, and matching questions. These exams must be taken on the scheduled day (see the Tentative Schedule at the end of the syllabus).

Attendance and Add/Drop Policy

You have until half way through the semester to drop. If you elect to do so, be sure to drop yourself. Do not assume you have been automatically dropped! This is very important, as after the half way point a grade must be given, by state law, whether you attend class or not.

College Policies

The college has several policies that you will be expected to adhere to in my course. The Policy on Students with Disabilities, the University Honor Code, the Policy on Cheating and Plagiarism, a statement on copyright, and the university computer requirement, portions of which are below, can all be found in the University Catalog (Policies and Regulations) and Class Schedule.

Academic Dishonesty

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entire honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences. See college catalog for details.

Subject to Change

This syllabus and schedule are subject to change in the event of extenuating circumstances. If you are absent from class, it is your responsibility to check on announcements made while you were absent.

Tentative Course Schedule

WEEK	BEGINNING	LECTURE TOPIC	LAB TOPIC
1	8/8	Introduction to Human Biology Chemistry of Life	Laboratory Safety Lab 1: Microscopy
2	8/15	Cells DNA and Protein Synthesis	Lab 2: Biological Macromolecules
3	8/22	Cell Reproduction Inheritance	Lab 3: Cell Structure and Function
4	8/29	Biological Evolution Introduction to the Human Body	**Lab Practical 1**
5	9/5	Nervous System	Lab 4: DNA Structure and Function
6	9/12	Endocrine System	Lab 5: Mitosis and Meiosis
7	9/19	Integumentary System	Lab 6: Genetics
8	9/26	Skeletal System	Lab 7: Histology
9	10/3	Muscular System	Lab 8: Cardiovascular System
10	10/10	Respiratory System	Lab 9: Maintenance Systems
11	10/17	Cardiovascular System	**Lab Practical 2**
12	10/24	Digestive System	Lab 10: Skeletal and Muscular Systems
13	10/31	Urinary System	Lab 11: Nervous System
14	11/7	Immune System and Disease	Lab 12: Endocrine and Reproductive Systems
15	11/14	Reproductive System	Lab 13: Dissection
16	11/21	*26-27/11 Thanksgiving* Human Growth and Development	Holiday
17	11/28	Human Ecology	**Lab Practical 3** Case Study Presentations
18	12/5	**Final Exam (date and time TBA)**	