

Biology 5 (BIOL5) Human Biology

<i>Semester: Spring 2021</i>	<i>Reedley Community College</i>
Instructor: Valeria Hochman Adler	<i>Class No. 55087</i>
Email: valeria.hochman-adler@reedleycollege.edu	<i>Date: 08/10/20- 12/11/20</i>
Lecture and Lab: 100 % online Asynchronous. This means you need to be an independent student and come to our non-mandatory Zoom meetings with questions.	Meetings: Spring 2021 all digital Fridays 1:45-2:45 pm for Lecture Fridays 3:00 pm -4:00 pm for Lab Non- mandatory.

Catalog Description:

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.

Prerequisites:

None, eligibility for ENGL 125, 126, or 153; or ESL 67 and 68 recommended. This is an introductory course using the principles approach to general biology which satisfies the general science requirements focused on students entering health or science careers. It is a prerequisite for all advanced science courses (Human Anatomy, 20; Human Physiology, 22; Human Anatomy and Physiology, 24; Microbiology, 31).

Student Learning Outcomes:

Upon completion of this course, students will be able to:

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

Course Objectives:

In the process of completing this course, students will:

1. read, analyze, evaluate, and discuss scientific method, the cell, and human levels of organization
2. learn the periodic table of the elements, the chemistry of the carbon

- atom, and the chemical structure of humans
3. analyze and interpret data on the homeostatic mechanisms within the human body
 4. learn the cell's structure, function, and the cell cycle in relation to the multicellular human body
 5. observe and document the structure and function of the human body by examining human body systems including: circulatory, digestive, respiratory, urinary, skeletal, muscular, nervous, sensory, endocrine, and reproduction
 6. review classical and molecular genetics and learn the processes of replication, transcription, and translation
 7. perform experiments, observe, and record data
 8. study evolution
 9. discuss social issues between humans and science
 10. develop a vocabulary to effectively communicate information related to anatomy and physiology.
 11. summarize the levels of structural organization important to the human anatomy

Required Course Materials

- Course requires an access code to the following textbook Sylvia Mader Human Biology 16th edition.
- Optionally, students may purchase a printed copy of the laboratory manual through the bookstore for a low cost but the manual will be provided as an electronic copy for free in canvas.

Technology Requirements

- The web/online portion of this course will occur through Canvas. All students must have access to a device with internet access to that allows students to retrieve and complete assignments through Canvas.
- Check Canvas and your Reedley College email accounts regularly (multiple times per week) for announcements.

ATTENDANCE AND DROP/ADD POLICY

You are required to attend **ALL** in-person class sessions. There are **NO** excused absences except as defined in the Reedley College Catalog. Sign-in sheets will be used in each class, and a student must sign in for themselves only.

In order to avoid being dropped from this class, you must complete the following tasks:
Web/Online requirements: The following tasks must be completed on Canvas by the end of the first week of instruction

1. Complete the Syllabus Quiz
2. Post a profile picture
3. Participate in the Check-In: Meet & Greet Discussion Board

LATE ASSIGNMENTS, CHEATING, AND MAKE-UP POLICY

No late assignments will be accepted **EVER**. **NO EXCEPTIONS**.

TESTS AND EVALUATION

Assignment Description	Points Possible
3 Lecture Exams (75 points each)	225
10 Quizzes (10 pts each)	100
1 Case Study Presentation	50
Online Discussion Boards (8pts each)	80
Lab Review Sheets/Activities	140
Connect Learnsmart Activities	160
1 Lab Practical Exam (20 points)	20
2 Lab Practical Exams (50 points each)	100
1 Lecture Final	150
Total Points Possible	1100

To calculate your grade, total all points earned and divide that number by the total points available (1,100). **Course grades are non-negotiable; Instructor reserves the right to curve individual tests and/or assignments. FINAL GRADES WILL NOT BE CURVED... ALSO, I DO NOT round up your grades to the next letter grade. No extra credit**

The final course grade is based on:

Percent Range	Grade
90-100	A
80-89.99	B
70-79.99	C
60-69.99	D
Less than 60	F

Lecture exams may be any combination of multiple-choice, true-false, matching, short-answer and essay questions based on the main objectives of each chapter. Please note that I require correct spelling and grammar. Lecture exams will be given during scheduled time periods over 3 days.

Lab exams will be practical based on the digital laboratory activities. They may include multiple choice, true-false, matching, and short answer questions. Lab exams will be given during scheduled time periods online over 3 days.

Lecture final exam will be comprehensive. Since this course is a prerequisite for all other Biology classes, it is important that you retain as much knowledge as possible from this course to ease your way in the following semesters. The final exam will be given during a 3 day period

Discussion Board Posts

Most weeks will require discussion board posts as part of the web/online part of this class. Topics will relate to material covered for that unit. All discussion board topics and due dates can be found on Canvas. No late posts will be accepted.

Note on discussion board/online etiquette: All students are expected to be respectful when posting and reply to their peer's posts. The purpose of these discussions is to facilitate peer learning in a safe and respectful environment. Students who make disrespectful and/or inappropriate posts/comments in the discussion board forums will be subject to Reedley College Disciplinary Procedures (see link above under the College Policy section).

Quizzes will occur on dates specified on the course schedule. Quizzes are to be assigned and completed through canvas. Quizzes may only be accessed one time, and must be completed in one sitting. Material may include a combination of multiple-choice, true-false, matching, and short answer questions. Note on technology: Quizzes will not be reset or allowed to be made up due to technology issues (e.g. internet connection lost, computer battery died, ect.). It is the student's responsibility to make sure the correct technology requirements are met to complete the quiz, when accessed, in one sitting.

Case Study will be assigned in the 5th week of class. At this time, the class will be broken up into groups of between 3-4 students. Each group of students will be assigned a 'patient' with an example disease. At the conclusion of the semester, each group will prepare a presentation. Specific directions will be available on Canvas. If you do not fulfill the requirements of this presentation assignment in its entirety, you cannot pass Biol 5.

***** I reserve the right to make changes in this syllabus with notification *****

Communication Policy

The best way to get a hold of me is by sending me a direct message through canvas. Don't know how to send a message in canvas? Check out this quick guide [How to send a message in canvas](#).

- ☒ Please allow a 48 hr response time. I am very prompt with my email responses, however, there are times when it may take me up to 48 hrs to respond. If you do not receive a response from me after 48 hrs then please resend it
- ☒ Emailing and messaging can be used 24/7. If I expect to be away from my computer for any significant length of time, you will be notified in advance.

Office Hours

For Spring 2021, all my office hours will be delivered digitally as virtual office hours. During these hours, I am present on zoom (please see canvas for connection links). If you would like to meet with me outside of these office hours, please email me to arrange an appointment to meet.

Canvas

All lecture and lab handouts, lecture notes, course schedules, and announcements are available at our Canvas Course shell

Drops: You have until the end of the 9th week to drop the class. If you elect to do so, drop yourself. Do not assume you have automatically been dropped. After the 9th week you must be assigned a grade by state law, whether you attend class or not.

Tutoring: Tutors are available in the tutorial center. If you have not had a biology class since high school, working with a tutor will get you up to speed. The tutors are former students who know how to study for the class. "With this statement on my course syllabus, I am referring each of my enrolled students in need of academic

support to tutorial services. Referral reason: Mastering the content, study skills, and basic skills of this course is aided by the use of trained peer tutors”.

College Policies

The university 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.

“Students at the 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 responsibility for seeing that their 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 entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.” Reedley College Catalog pg. 45. Please see Disciplinary Procedures in the Student Conduct Standards and Grievance Procedures Handbook available in the Vice-President of Student Services office, or at the link listed below. For a comprehensive list of Student Conduct Standards, see:
<http://reedleycollege.edu/index.aspx?page=233>

If you have a verified need for an academic accommodation or materials in alternate media (e.g. Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact the instructor as soon as possible.

Cheating and Plagiarism:

I DO NOT TOLERATE CHEATING. PERIOD. Most of you are entering into the health care field and could harm or seriously injure other human beings if you do not know the basic information in this course.

Any student caught cheating or plagiarizing will be subject to the Reedley College disciplinary procedures (review the Reedley College catalog section on academic dishonesty). Electronics of any kind are not permitted during exams and will result in an automatic zero for that exam.

Students with diagnosed disabilities should contact the Disabled Students Programs and Services' (DSP&S). Please give me a copy of the letter you receive from DSP&S detailing class accommodations you may need. If you require accommodation for test-taking please make sure I have the letter no less than three days before the test. If you have a need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

TENTATIVE SCHEDULE

Modules /Week	Lecture (Book Chapter)	Lab (Manual Chapter)
1	Introduction/Syllabus Chapter 1: Introduction to Science And Human Biology Syllabus Quiz Discussion Board 1	Laboratory Safety Lab 1 : Introduction to Microscopy
2	Chapter 2: Chemistry Quiz 1 Discussion Board 2	Lab 2: Biological Macromolecules
3	Chapter 3: Cells Quiz 2 Discussion Board 3	Lab 3: Cell Structure and Function
4	Chapter 19: Patterns of Chromosome Inheritance Lecture Exam 1	Lab 4: DNA: Transcription and Translation Lab Practical 1 (20pts)
5	Chapter 21: Genetic Inheritance/DNA Quiz 3 Discussion Board 4	Lab 5: Mitosis and Meiosis
6	Chapter 23: Biological Evolution Quiz 4 Discussion Board 5	Lab 6: Genetics and Inheritance
7	Chapter 4: Introduction to the Human Body and Integumentary System Quiz 5 Discussion Board 6	Lab 7 : Histology
8	Chapter 5 and 6: Cardiovascular System Chapter 9: Digestive System Quiz 6 Discussion Board 7	Lab 8: Cardiovascular System
9	Chapter 11: Excretory System Chapter 10: Respiratory System Lecture Exam 2	Lab 9: Homeostasis: Digestion, Respiration and Urinary Systems
10	Chapter 12: Skeletal System Quiz 7	Lab Practical 2
11	Chapter 13: Muscular System Quiz 8	Lab 10: Musculoskeletal System Drawing 10: Sarcomere
12	Chapter 14: Nervous System Chapter 15: Senses Quiz 9 Discussion Board 8	Lab 11: Nervous System and Senses

13	Chapter 16: Endocrine System Chapter 17: Reproductive System Quiz 10	Lab 12: Reproduction and Development
14	Chapter 18: Human Growth and Development Lecture Exam 3	Lab 13: Virtual Pig Dissection
15	Canvas Readings (Disease and Immune Systems)	Lab Practical 3
16	Chapter 24: Ecosystems Discussion Board 9	Lab 14: Human Evolution
17	Chapter 25: Human Populations Discussion Board 10	Case Study Presentations
18	Final Exam (Cumulative)	Finals No Labs

