Biology 5 (BIOL 5) Human Biology

Semester: Fall 2019 Reedley Community College	
Instructors: Karen Marks Valeria Hochman-Adler	*Class No. 51292*
Email:karen.marks@reedleycollege.edu Valeria.hochman-adler@reedleycollege.edu	Lecture Times: M 3:00-5:50p in LFS17
Ms. Marks' phone: 559-638-0300 ext. 3715	Lab Times: W 3:00-5:50p in LFS17
Office: LFS 14	
Office Hours: W 2:30-3:30 Th 1:00-3:00 F 10:00-12:00	

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 Materials:

1. Mader, Sylvia S. and Michael Windelspecht, *Human Biology*, 16th edition. 2018. (You don't need a hard copy, just the digital book will do, as long as you have CONNECT access)
2. Reedley College BIOL 5 – Human Biology Lab Manual
3. Scantron #882-E for lecture tests (x5)

Optional Materials:

1. Rubber gloves, protective clothing (for dissection labs)

ATTENDANCE AND DROP/ADD POLICY

You are required to attend **ALL** class sessions. There are NO excused absences except as defined in the Reedley College Catalog. Students with excessive absences (12 cumulative hours or more) may be dropped from the class.

I reserve the right to drop students (both enrolled and waitlisted) based on the following policy:

1. Student does not attend the first lecture.
2. Student does not attend the first lab.
3. Student misses a cumulative 3 hours (lecture or lab) in the first week.
4. Student misses a cumulative 4 hours (lecture or lab) in the first three weeks.

ADD/ LATE ADD POLICY: In the event that there are open slots on the roster, students will be added to the course in order of the waitlist, followed by drop-ins. Students may officially add the class when given an add code by the instructor. In order to receive an add code, you must follow the same attendance policy listed above. Failure to do so will result in you not receiving an add code. Once you receive an add code, it is YOUR responsibility to use it in a timely manner! Add codes MUST be used as soon as possible, no later than the add deadline. Failure to use an add code will result in you being dropped from the class.

LATE ASSIGNMENTS AND MAKE-UP POLICY

Late assignments (such as lab reports) will not be accepted. **After one week any missed grade may not be made up** unless prior written arrangements have been made. This is to ensure fairness both to the other students and to me.

Lab practical exams CANNOT BE MADE UP. Lecture exams cannot be made up, unless extreme circumstances, documented in writing, are provided. The instructor holds final decision on what constitutes an acceptable circumstance.

CANCELLED CLASSES: If I must cancel a class meeting, you will be notified both on the door of the classroom with an official form as well as with a message sent from me via Canvas. I will NEVER leave a handwritten notice on the door cancelling class.

TESTS AND EVALUATION

Assignment Description	Points Possible
3 Lecture Exams (100 points each)	300
1 Writing Assignment	100
1 Case Study Presentation	100
10 Quizzes (10 points each)	100
Connect Readings	110
Lab Review Sheets/Activities	140
Lab Practical Quiz	20
2 Lab Practical Exams (50 points each)	100
1 Lecture Final	180
Total Points Possible	1150
Extra Credit (See below for details)	Maximum of 30

To calculate your grade, total all points earned and divide that number by the total points available (1,150). **Course grades are non-negotiable**; **Instructor reserves the right to curve individual tests and/or assignments. FINAL GRADES WILL NOT BE CURVED OR ROUNDED.**
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. If I can't read it, I can't grade it! Write neatly!

Lab quiz and exams will be practical based on the work done in the laboratory. They may include multiple choice, true-false, matching, and short answer questions.

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.

Quizzes are given online on Canvas/Connect and will open one week prior to the deadline. Failure to complete quizzes within the allotted timeframe will result a zero. Material may include and combination of multiple-choice, true-false, matching, and short answer questions.

Lab reviews will be collected at the end of each laboratory period where a laboratory exercise was conducted. These must be complete before you leave the lab period unless directed otherwise. Lab drawings must be completed and turned in before you leave the lab period. Lab reviews and drawings should be done AFTER you complete the lab itself. Failure to participate in labs will result in a reduced score.

Case Study will be assigned around 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 give a 10-15 presentation to the class describing their patient's disease, and the appropriate courses of treatment. Specific directions will be given both in class as well as put on Canvas.

Writing Assignment will be assigned around the 3rd week of class. The writing assignment is an individual assignment. Directions for this assignment will be discussed in class and information can also be found on Canvas.

Extra Credit I strongly recommend doing extra credit if you feel you have a borderline grade. You earn up to a maximum of 30 points throughout the semester. These points will come from in-class pop quizzes/question sets or from scientific paper summaries. You MUST be present in class to receive these points so regular attendance is absolutely necessary. Extra credit will not be given in any other format!

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

CANVAS

All lecture and lab handouts, lecture notes, course schedules, and announcements are available at https://scccd.instructure.com/login/ldap. If you have technical difficulties and need help with Canvas, you can call the Canvas helpline at (559) 499-6070.

Behavioral Standards

Please respect other students, the laboratory materials, and me. Disruptive behavior that interferes with the teaching and learning processes will be cause for appropriate penalties as described under "University Policies" below.

LECTURE: Please do not bring food or open drinks into lectures since we use a lab classroom for our lecture times. Breaks will be given during the 3-hour block for you to use the restroom or eat a snack. Phones should stay out of sight and in off, silent, or vibrate mode. Laptops and tablets are okay, provided they are not a distraction for other students. Please show general courtesy to me, other students, and the classroom itself.

LAB: You will be given a Safety Rules sheet to sign in the lab, which delineates further safety procedures that you MUST follow. OTHER COURSES USE THE MODELS AND THE LAB. PLEASE BE RESPONSIBLE. Do not use pencils to point out structures on the models. Preserved animal specimens should be treated with the same respect you would give to a live animal. Please remember to clean up the lab after every exercise, as areas left dirty or messy at the end of the period will result in those student groups being **docked 5 points** for every offense. **No food, open beverages are allowed in the lab at any time.** Food

and/or liquids in the laboratory is **never** allowed and may result in deduction of points or being asked to leave.

Punctuality: Please be on time to all scheduled class times. I understand that in rare instances, students may be late. However, students who routinely disrupt the class by walking in late may face point deductions.

Children/Visitors In Class: In order to promote a positive learning environment, please make arrangements for your child's care while class is in session. Do not bring children to class. Adult visitors must have prior authorization to stay in the classroom. Unauthorized visitors will be asked to leave.

Technology/Cell Phones: No cell phones to be used in class. I am aware that emergencies arise, so place your electronics on silent or vibrate mode. Distracting cell phone users will be asked to leave the class. Use of tablets and laptops are fine, provided they are not a distraction to other students. If you are using either, please sit in the rear of the classroom. No technological devices (phones, laptops, tablets, smart watches, etc) may be used during any type of exam.

Dress code: In order to participate in lab activities, wearing long pants (or equivalent) and shoes with closed toes are required. Individuals who do not comply with the lab dress code will be asked to leave the classroom, but are welcome to return once in proper lab attire.

Drops: You have until October 11 to drop the class. If you elect to do so, drop the class yourself. Do not assume you have automatically been dropped. After October 11 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.

Cheating and Plagiarism:

I DO NOT TOLERATE CHEATING. PERIOD. Most of you are entering into the healthcare field and could harm or seriously injure other human beings if you do not know the basic information in this course.
The University policy reads, "Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit; such acts also include assisting another student to do so. Typically, such acts occur in relation to examinations. However, it is the intent of this definition that the term 'cheating' not be limited to examination situations only, but that it includes any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means. Cheating includes, but is not limited to, copying others’ work, knowingly and willfully allowing someone to copy your work, plagiarism, giving false excuses for deadline extensions/exemptions, and using/possessing test or question banks.

Any student caught cheating or plagiarizing will be given a zero on the assignment and may be subject to disciplinary action by the dean. Electronics of any kind are not permitted during exams and will result in an automatic zero for that exam.

DSP&S Students:

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

Please bring your textbook to lecture and your textbook and lab manual to every lab. This is very important! We will try to follow this schedule as best as possible, however if need be some items may be moved up/pushed back as needed (such as lectures). If there are any changes to deadlines (quizzes, assignments, exams), I will make both an announcement in class, as well as send out a Canvas message relaying such changes. LR means lab review sheets (Required)

Course Schedule			
Week	**Dates**	**Lecture (Book Chapter)**	**Lab (Manual Chapter)**
1	MON 8/12	Introduction/Syllabus Exploring Life and Science (1) Chemistry of Life (2)	
1	WED 8/14		**Laboratory Safety** Lab 1 : Introduction to Microscopy
2	MON 8/19	Chemistry of Life (2) Cell Structure and Function (3)	
2	WED 8/21		Lab 2: Biological Molecules
3	MON 8/26	DNA Biology and Technology (22) Chromosome Inheritance (19) **Quiz 1 due** ***Term Paper Assigned***	
3	WED 8/28		Lab 3: Cell Structure and Function
4	MON 9/2	**LABOR DAY HOLIDAY – NO CLASS** **Quiz 2 due**	

4	WED 9/4		Lab 4: DNA, Transcription and Translation
5	MON 9/9	Cancer (20) Genetic Inheritance (21)	
5	WED 9/11		**LAB PRACTICAL QUIZ** Lab 5: Mitosis and Meiosis
6	MON 9/16	Organization and Regulation of Body System Organ Systems (4) **Lecture Exam 1 (Ch 1, 2, 3, 22, 19, 20)** **Quiz 3 due**	
6	WED 9/18		Lab 6: Genetics and Inheritance ***Case Study Assigned***

7	MON 9/23	Organization and Regulation of Body System Organ Systems (4) Cardiovascular: Heart and Blood Vessel (5)	
7	WED 9/25		Lab 7: Histology
8	MON 9/30	Cardiovascular System: Blood (6) Biology of Infectious Disease (8)	
8	WED 10/2		Lab 8: Cardiovascular System
9	MON 10/7	Lymphatic System and Immunity (7) Digestive System (9) **Quiz 4 due** ***Rough Draft Term Papers Due***	
9	WED 10/9		Lab 9: Homeostasis, Digestive, Respiratory, and Urinary Systems
10	MON 10/14	Respiratory System (10) Urinary System (11) **Quiz 5 due**	
10	WED 10/16		LAB PRACTICAL 1

11	MON 10/21	Urinary System (11) **Lecture Exam 2 (Ch 21, 4, 5, 6, 8, 7, 9)**	
11	WED 10/23		Lab 10: Musculoskeletal System
12	MON 10/28	Skeletal System (12) Muscular System (13) **Quiz 6 due**	
12	WED 10/30		Lab 11: Nervous System and Senses
13	MON 11/4	Nervous System (14) Senses (15) **Quiz 7 due** ***Final Draft Term Papers Due***	
13	WED 11/6		Lab 12: Pig dissections ***Case Study Rough Drafts/Outlines Due***
14	MON 11/11	**VETERANS' DAY – NO CLASS** **Quiz 8 due**	
14	WED 11/13		Lab 13: Endocrine and Reproductive Systems
15	MON 11/18	Endocrine System (16) **Lecture Exam 3 (10, 11, 12, 13, 14, 15)**	
15	WED 11/20		**LAB PRACTICAL 2**
16	MON 11/25	Endocrine System (16) Reproductive System (17)	
16	WED 11/27		Lab 14: Human Evolution
17	MON 12/2	Development and Aging (18) Human Evolution (23) **Quiz 9 due**	

17	WED 12/4	**Exam Review**	**Case Study Presentations**
18	MON 12/9	**Final Exam (Cumulative)** **Quiz 10 due**	

Important Dates

- AUGUST 23 Last day to drop a class for full refund (no "W" on transcript)
- SEPTEMBER 2 Last day to add/drop a class (no "W" on transcript)
- SEPTEMBER 20 Last day to declare pass/no pass (P/NP) grade option
- OCTOBER 11 Last day to drop with a "W". **GRADES ASSIGNED AFTER THIS DATE**
- FINAL EXAMINATION: Monday, Dec 9th from 3-4:50pm in LFS 17