

Biology 5 (BIOL5) Human Biology

<i>Semester: Spring 2018</i>	<i>Reedley Community College</i>
Instructor: Karen Evans Email:karen.evans@reedleycollege.edu	<i>Class No. 52020, 52022, 52025</i> Lecture Times: 52025: Tues: 6:00-8:50PM
Phone: TBD	Lab Times: 52020: 2:30-5:20PM 52022: 2:30-5:20PM
Office: TBD	52025: Thurs: 6:00-8:50PM
Office Hours: TBD	

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*, 15th edition. (You don't need a hard copy, just the digital book will do, as long as you have CONNECT access)
2. Mader, Sylvia S., *Human Biology Lab Manual*, 15th edition. ****Make sure you get the bundle from the bookstore which contains CONNECT access****
3. Scantron #882-E for lecture tests (x6)
4. Package of index note cards

Optional Materials:

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

NO FOOD, BEVERAGES, CELLULAR PHONES, PAGERS, OR PROFANITY AT ANY TIME

If you or your electronics become a disturbance to the class, points will be deducted from your scores on assignments and you may be asked to leave. All students must also adhere to the safety contract received and signed at the beginning of the semester. Failure to do so may result in you being asked to leave.

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. If you are absent more than **FIVE** hours during the semester, you **MAY** be dropped from the class. If you are absent more than **TEN** hours before the drop deadline, you **WILL** be dropped from class.

If you miss more than **TEN** hours of course time in the semester, your final grade will be lowered by one letter grade. For example, if you earned an A but missed 11 hours of class, your final grade will be a B. If you miss more than **TWENTY** hours of course time in the semester, your grade will be lowered by two letter grades. For example, if you earned an A but missed 21 hours of class, your final grade will be a C. If you miss more than **THIRTY** hours of course time in the semester you will fail the class, no questions asked.

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.
5. Student misses 6 hours (lecture or lab) up to drop date without providing a valid excuse (determined by me).

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 before the next scheduled class meeting, otherwise you forfeit your code. Failure to use an add code will result in you being dropped from the class.

LATE ASSIGNMENTS, CHEATING, 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. Any student caught cheating will be subject to the Reedley College disciplinary procedures (see the catalog). Be aware that the procedures require a written notification to the dean that will become a part of your permanent record.

Lab practical exams can NOT be made up. Period. 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.

TESTS AND EVALUATION

Assignment Description	Points Possible
4 Lecture Exams (75 points each)	300
1 Case Study Presentation	100
10 Quizzes (10 points each)	100
Connect Readings	100
8 Drawings (5 points each)	40
Lab Review Sheets/Activities	120
2 Lab Practical Exams (50 points each)	100
1 Lecture Final	140
Total Points Possible	1000
Extra Credit (See below for details)	Maximum of 25

To calculate your grade, total all points earned and divide that number by the total points available (1,000). **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.**

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 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 with one week to complete. Failure to complete quizzes within the allotted timeframe will be given 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. **Lab drawings** must be completed and turned in before you leave the lab period.

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 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.

Extra Credit I strongly recommend doing extra credit if you feel you have a borderline grade. You earn up to a maximum of 25 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 in order to receive these points so regular attendance is a must.

***** 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.

Professional Behavior is expected at ALL TIMES

Please respect other student, the laboratory materials, and me. No food, cellular phones, pagers, or profanity at any time! I am aware that emergencies arise, but place your electronics on silent or "manner" mode. Disruptive behavior that interferes with the teaching and learning processes will be cause for appropriate penalties as described under "University Policies" below.

Food and/or liquids in the laboratory may result in deduction of points.

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. 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 or beverages allowed. Cell phone use will not be tolerated in this class; turn off/silence your cell phones prior to class. Students are allowed to do audio recordings of lectures but not video. Web or internet posting of recorded lecture materials are not allowed. Laptops may be used in this class; laptop users should sit in the back row to avoid distracting others.

Children 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.

Cell Phones: No cell phones to be used in class. They must remain on silent or off. Distracting cell phone users will be asked to leave the class.

No food, open beverages are allowed in the class at any time. No profanities are allowed in class.

Dress code: In order to participate in lab activities, wearing long pants (or equivalent) and shoes with closed toes are required.

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.

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 include any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means.

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.

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	Tuesday 1/9	Introduction/Syllabus Exploring Life and Science (1) Chemistry of Life (2)	
1	Thursday 1/11		Laboratory Safety and Lab 3 : Light Microscopy <u>LR 1 pg 33</u> <u>Drawing 1: Cheek/Cell Structure</u>
2	Tuesday 1/16	Quiz 1 opens Chemistry of Life (2) Cell Structure and Function (3)	
2	Thursday 1/18		Lab 4: Chemical Composition of Cells <u>LR 2 pg 48</u>
3	Tuesday 1/23	Quiz 2 opens Organization and Regulation of Body System Organ Systems (4) Cardiovascular : Heart and Blood Vessel (5)	
3	Thursday 1/25		Lab 5: Cell Structure and Function <u>LR 3 pg 60</u> <u>Drawing 2: Epithelial/Connective Tissue</u>
4	Tuesday 1/30	Quiz 3 opens Cardiovascular : Heart and Blood Vessel (5) Cardiovascular System: Blood (6)	
4	Thursday 2/1		Lab 6 : Body Tissues <u>LR 4</u>
5	Tuesday 2/6	Lecture Exam 1 (1-5) Lymphatic System and Immunity (7)	
5	Thursday 2/8		Lab 8: Cardiovascular System <u>LR 4 pg 104</u> <u>Drawing 3: Heart Structure (Internal and External)</u>
6	Tuesday 2/13	Quiz 4 opens Biology of Infectious Disease (8) Digestive System (9)	
6	Thursday 2/15		Lab 11: Homeostasis <u>LR 6 pg 148</u> <u>Drawing 4: Nephron and Tubules</u>
7	Tuesday 2/20	Quiz 5 opens Respiratory System (10) Urinary System (11)	
7	Thursday 2/22		Lab Exam 1 (Lab 3, 4, 5, 6, 8, 11)
8	Tuesday 2/27	LECTURE EXAM 2 (6-10) Urinary System (11)	

8	Thursday 3/1		Lab 12: Musculoskeletal System LR 8 pg 165-166 <u>Drawing 5: Muscle fiber/tissue</u>
9	Tuesday 3/6	Quiz 6 opens Skeletal System (12) Muscular System (13)	
9	Thursday 3/8		Lab 13: Nervous System and Senses LR 9 pg 181 <u>Drawing 6: Eye/Ear</u>
10	Tuesday 3/13	Quiz 7 opens Muscular System (13) Nervous System (14)	
10	Thursday 3/15		Lab 14: Reproduction and Development LR 10 pg 198
11	Tuesday 3/20	Nervous System (14) Senses (15)	
11	Thursday 3/22		Lab 7: Organization of the Body Virtual Pig Dissection LR 7 pg
12	Tuesday 3/27	SPRING BREAK: NO CLASS	SPRING BREAK: NO CLASS
12	Thursday 3/29	SPRING BREAK: NO CLASS	SPRING BREAK: NO CLASS
13	Tuesday 4/3	LECTURE EXAM 3 (11-15) Endocrine System (16) Reproductive System (17)	
13	Thursday 4/5		Lab 15: Mitosis and Meiosis LR 11 pg 215 <u>Drawing 7: Mitosis/Meiosis</u>
14	Tuesday 4/10	Quiz 8 opens Development and Aging (18) Chromosome Inheritance (19)	
14	Thursday 4/12		Lab 16: Patterns of Genetic Inheritance LR 12 pg 230
15	Tuesday 4/17	Quiz 9 opens Chromosome Inheritance (19) Cancer (20)	
15	Thursday 4/19		Lab Exam 2 (Lab 12, 13, 14, 7, 15, 16)
16	Tuesday 4/24	LECTURE EXAM 4 (16-20) Genetic Inheritance (21)	
16	Thursday 4/26		Lab 17: DNA and Biotechnology LR 13 pg 245-246 <u>Drawing 8: DNA/RNA Molecule</u>
17	Tuesday 5/1	Quiz 10 opens DNA Biology and Technology (22) Human Evolution (23)	
17	Thursday 5/3		Lab 18: Human Evolution LR 14 pg 264
18	Tuesday 5/7	Exam Review	Case Study Presentations
18	Thursday 5/9	Exam Review	
19	Tuesday 5/15	Final Exam (Cumulative)	

Important Dates

- January 19 Last day to add/drop a class for full refund (no “W” on transcript)
- January 28 Last day to add/drop a class (no “W” on transcript)
- February 9 Last day to declare pass/no pass (P/NP) grade option
- March 9 Last day to be dropped with a “W”
- FINAL EXAMINATION: TBD