Syllabus: Biology 5 – Human Biology

Course Information

Semester: Fall 2018 Section: 55184 Class Meetings: Lecture – Web/Online Lab – Tuesday 1:30 – 4:20 PM, LFS 17

Instructor: Whitney Menefee

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- Office Phone: (559) 638 0300 ext. 3257
- Office Hours: Tues 12:00 1:30PM, Wed 1:30 2:30 (LRC) & Fridays 9:30AM 12:00PM

Course 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.

Student Learning Outcomes

Upon completion of this course, students will be able to

- demonstrate knowledge regarding the process of science and society, microscopy, and the cell
- identify human body levels of organization and homeostatic mechanisms
- demonstrate knowledge of the chemical basis of life
- evaluate scientific literature and current biological achievements
- apply the principles of genetics to humans and understand the outcome of normal and abnormal DNA
- 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
- 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

- read, analyze, evaluate, and discuss scientific method, the cell, and human levels of organization
- learn the periodic table of the elements, the chemistry of the carbon atom, and the chemical structure of humans
- analyze and interpret data on the homeostatic mechanisms within the human body
- learn the cell's structure, function, and the cell cycle in relation to the multicellular human body

- 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
- review classical and molecular genetics and learn the processes of replication, transcription, and translation
- perform experiments, observe, and record data
- study evolution
- discuss social issues between humans and science
- develop a vocabulary to effectively communicate information related to anatomy and physiology.
- summarize the levels of structural organization important to the human anatomy

Course Requirements and Policies

Required Course Materials

- This is a no cost textbook course. All materials are Open Educational Resources that will be no cost to the student. All materials will be provided by the instructor through Canvas.
- Scantrons: 882-E (4x lecture exams)

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.

Class Policies

Attendance and Drop Policy

- Students are expected to attend all in-person class sessions. Sign-in sheets will be used and each student must sign in for himself/herself ONLY.
 - If you miss 12 hours or more of the in-person class meetings throughout the semester, it will result in the lowering of your final course letter grade by one letter grade.
- 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 (8/17/18 @11:59PM)
 - 1. Complete the Syllabus Quiz
 - 2. Post a profile picture
 - 3. Participate in the Check-In: Meet & Greet Discussion Board

• In-person requirements: Students must attend the first day of in-person meeting (lab) *Failure to complete ALL the tasks listed above, will result in a student being dropped from this course after the first week of instruction.*

- The final drop date for this course is October 12th, 2018.
 - It is the student's responsibility to drop this course if he/she feels necessary. The instructor will NOT drop any students after the first week of instruction.

Late Work Policy

Exams

Exams for this course will be taken in person during our scheduled face-to-face lab time.

- Lecture Exams may only be made up due to extreme circumstances, at the discretion of the instructor, if arranged with the instructor *before the scheduled exam period (at least 3 hrs prior)*.
- Lab Exams can only be taken on the day they are scheduled, no make-ups, NO EXCEPTIONS

Online Assignments/In-class Activities

No late work for any assignments/activities, including quizzes, will be accepted for any reason. No exceptions.

Communication Policy

Email/Messaging

The best and most effective way of communicating with me is to email me at <u>mailto:whitney.menefee@reedleycollege.edu</u> or by sending me a message in Canvas. Not sure how to send a message in Canvas? Check out this quick guide: <u>How to send a message in Canvas</u>.

- Please allow a 24hr response time! I will always respond to emails and messages within 24 hours, but please allow up to 24 hours. Do not send an email and two hours later send the email again if I haven't responded. If I don't respond within 24 hours, please double check the email address and resend your message then, chances are I didn't receive it!
- Emailing and messaging can be used 24 hours a day, 7 days a week!

Office Hours

I hold on-campus and virtual office hours. If you would like to come by my office, I am always guaranteed to be in my office during these hours. My office is on the Reedley College Campus in room Life Science 13. You can drop by anytime during this time frame, no appointment needed! If you are unable to make these office hours, but would like to meet with me in person, please email me and we will arrange an appointment to meet in my office. My virtual office hours are held through Canvas using the messaging function. You can expect an immediate response during this time frame if you send me a message in Canvas.

College Policies

- "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: <u>http://reedleycollege.edu/index.aspx?page=233</u>
- 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.

Grading Policy

Final letter grade scale: A = 90% +, B = 89 - 80%, C = 79 - 70%, D = 69 - 60%, F = 59% or less.

| TASK | Points | % of Grade | Breakdown | |
|-------------------------|--------|------------|--------------------------------------|--|
| Lecture Exams | 150 | 15% | 3 Exams @ 50 points each | |
| Lab Exams | 150 | 15% | 1 Exam @ 30pts; 2 Exams @ 60pts each | |
| Final Exam | 150 | 15% | 1 cumulative final | |
| Quizzes | 120 | 12% | 16 @ 7.5 points each | |
| Lab Reports | 150 | 15% | 15 @ 10 points each | |
| Lab Drawings | 50 | 5% | 10 @ 5 points each | |
| Discussion Board Posts | 80 | 8% | 8 @ 10 points each | |
| In-Class Reviews | 50* | 5% | 15 @ 4 points/unit = 60 pts | |
| | | | (* 10 points extra credit available) | |
| Case Study Presentation | 50 | 5% | 1 group presentation | |
| Writing Assignment | 50 | 5% | 1 paper | |
| Totals | 1000 | 100% | | |

Grades will be posted on Canvas and will be updated regularly throughout the semester.

Course Exams and Major Assignments

Lecture Exams

Exams may only be made up due to extreme circumstances, at the discretion of the instructor, if arranged with the instructor before the scheduled exam period (at least 3 hrs prior). There will be 3 midterms and a comprehensive final exam (see the Tentative Schedule for exam dates). Each exam will include new material covered in the corresponding unit. Exams will consist of multiple-choice, matching, fill in the blank, and short-answer/essay questions. Forming study groups is highly recommended. All exams will be given in class. **Final Exam** is cumulative.

Lab Exams

Lab exams must be taken on the day that they are scheduled. There are no make-ups, no exceptions. There will be 3 lab exams (see the Tentative Schedule for exam dates). These exams will be in the form of a practical, where stations are set up with models, microscopes, and/or images for identification or an explanation. Students will be timed (45 seconds per question) and will rotate around the room until all students have been through all stations. Questions will be a variety of fill-in, multiple choice, and matching questions.

Quizzes

Quizzes will be assigned and completed through Canvas (See Canvas for due dates). Quizzes may only be accessed one time, so must be completed in one sitting. Quizzes will consist of multiple-choice, true-false, and short answer questions and will contain information covered in the unit up to that point. *Quizzes will not be accepted past the due date (will receive a 0) and cannot be made up if missed.*

• 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.

Lab Reports

Each lab in-person class session will have an associated lab report. Lab reports are due at the end of their scheduled class session. No late lab reports will be accepted. *You cannot turn in a lab report for a lab that you were not in attendance of.* Lab reports must be submitted on the lab report pages provide on Canvas and/or in class.

Lab Drawings

For some lab sessions, students will be required to submit a lab drawing. Exact details of the drawing will be given in class and posted on Canvas. These lab drawings should be done on a sheet of plain white paper. Lab drawings are due at the time of the lab exam for each unit. No late lab drawings will be accepted.

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 it 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).

In-Class Reviews

At the beginning of each in-person class meeting, there will be a review session of the previous week's material. A variety of activities, which may include group and/or individual work, will be assigned during this time. These activities are due at the end of the review session, before beginning that class meeting's lab material. If you come in late to class, you will not be given extra time to complete these activities. You cannot complete or make-up these activities if you are not present in class.

Case Study Presentation

Each student will be responsible for working with a group of students (3-4) in this course to complete an in-class case study presentation. 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. Detailed instructions (including topics, formatting requirements, rubrics, due dates, ect.) for the assignment are available on Canvas. *If you do not fulfill the requirements of this presentation assignment in its entirety, you cannot pass Biol 5.*

Writing Assignment

Students are required to complete one paper in this course to fulfill the writing requirement of this GE course; the word count of this assignment must be over 1000 words to pass this class. Detailed instructions (including topics, formatting requirements, rubrics, due dates, ect.) for the assignment are available on Canvas. You will submit a draft of your report for peer feedback. The instructor will grade the final version of your assignment. Note: All drafts and final reports must be submitted to TurnItIn (on Canvas) for the peer feedback and grading process. *If you do not fulfill the requirements of this writing assignment in its entirety, you cannot pass Biol 5.*

• *Plagiarism Detection:* The campus subscribes to TurnItIn plagiarism prevention service through Canvas, and you will need to submit written assignments to TurnItIn. Your work will be used for plagiarism detection and for no other purpose. TurnItIn Originality Reports will be available for your viewing.

Subject to Change Statement

This syllabus and tentative schedule are subject to change with notification. If you are absent from class, it is your responsibility to check on announcements made while you were absent.

| DATES | Lecture | Lab | Other |
|---------|--|--|--|
| Week 1 | Course Intro Science of Biology | Safety Microscopy | |
| Week 2 | Biological Molecules | Biological Molecules | |
| Week 3 | The Cell | Cell Structure and Function | |
| Week 4 | DNA Structure and Function | Lab Practical #1 DNA | |
| Week 5 | Mitosis & Meiosis | Lecture Exam Mitosis & Meiosis | |
| Week 6 | Genetics | Genetics | |
| Week 7 | Histology, Body Organization, & Homeostasis | Histology | |
| Week 8 | The Cardiovascular System The Immune System | The Cardiovascular System | Writing Assignment Topics Due |
| Week 9 | The Respiratory System The Digestive System The Urinary System | The Respiratory System & Homeostasis | |
| Week 10 | | Lab Practical #2 Lecture Exam | |
| Week 11 | The Skeletal System The Muscular System | Muscles & Bones | |
| Week 12 | The Nervous System Sensory/Special Senses | The Nervous System | Rough Draft of Writing Assignments Due |
| Week 13 | The Endocrine System The Reproductive System | Reproduction | Case Studies Assigned in Class |
| Week 14 | Evolution and Biodiversity | Pig Dissections | |
| Week 15 | Evolution and Biodiversity | Evolution | Final Draft of Writing Assignment Due |
| Week 16 | | Lab Practical #3 Lecture Exam | |
| Week 17 | Final Exam Review | Case Study Presentations | |
| Week 18 | Final Exam - Cumulative | | |

Tentative Course Schedule*

* For detailed weekly schedule, including assignment due dates, ect, see Syllabus and Modules on Canvas.

Other Important Dates:

- Final Drop Date to avoid "W": <u>August 31st</u>
- Final Drop Date (with "W"): October 12th