Biology 5 – Human Biology Syllabus

Spring 2018 Section: 58986 Class Meetings: Lecture – Monday & Wednesday 1:30 – 2:45PM, Life Science C Lab – Wednesday 10:25AM – 1:15PM, Life Science C

Instructor: Whitney Menefee, M.S. E-mail: whitney.menefee@reedleycollege.edu Office Phone: (559) 638 – 0300 ext. 3257 Office: LFS 13 Office Hours: Tuesday 2:00 – 4:00PM Virtual Office Hours*: Friday 9:00 – 10:00AM *details on how to access virtual office hours posted on Canvas

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.

I. 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

II. 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

III. Required Course Materials:

- Textbook/Lab Manual Bundle: Human Biology w/Connect and Human Biology Lab Manual, 15th Ed. Mader and Windelspecht; McGraw-Hill
 - ISBN: 978-1260263749
- Biology sketch paper (10 sheets)
- Scantrons: 882-E (5x exams)

IV. Technology/Canvas:

- Check your Reedley College email accounts and Canvas regularly for announcements.
- All lecture and lab PowerPoints, handouts, notes, schedules, grades, ect. will be posted on Canvas.

V. Class Policies

- Attendance Policy:
 - Students are expected to attend all class sessions. Sign-in sheets will be used and each student must sign in for himself/herself ONLY.
 - Students will be dropped from this course if they do not attend the first lecture and/or first lab without prior notification to the instructor.
 - Students will be dropped from this course if they have excessive absences of 8 hours or more of lab and/or lecture by the end of the third week of instruction (January 26).
 - If you miss 15 hours or more of this class throughout the semester, it will result in the lowering of your final course letter grade by one letter grade.
- Make-up Policy:
 - 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
 - Quizzes may not be made up and are not accepted past the due date.
 - No late work (assignments, lab reports, ect.) will be accepted.
- No cell phones should go off during this class. Please be respectful to your instructor and classmates by silencing your phone, and taking phone calls outside if necessary. If they ring or are used during a test or quiz, the student will receive a 0 for that exam or quiz. You cannot make up these assignments.

• COLLEGE POLICY ON CHEATING AND PLAGIARISM

"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.

VI. Grading

TASK	Points	% of Grade	Breakdown
Lecture Exams	200	20%	4 Exams @ 50 points each
Lab Exams	150	15%	2 Exams @ 75 points each
Final Exam	150	15%	1 cumulative final
Lab Reports	150	15%	15 @ 10 points each
Lab Drawings	50	5%	10 @ 5 points each
Quizzes	100	10%	10 @ 10 points each
Connect Readings	100	10%	4 units (a) 25 points/unit = 100 pts
			(# of Ch. will vary by unit)
Case Study Presentation	50	5%	1 group presentation
Writing Assignment	50	5%	1 paper
Totals	1000	100%	

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

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

VII. 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 4 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 2 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.
- Lab Reports. Each lab 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 from the lab manual. No photocopied or regular paper copies will be accepted.
- 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 Biology sketch paper (available for purchase at the Reedley College Bookstore). Lab drawings are due at the time of the lab exam for each unit. No late lab drawings will be accepted.
- Quizzes. Quizzes will be assigned and completed through Canvas (See Tentative Schedule and Unit Schedules on Canvas for due dates). Quizzes may only be accessed one time and must be completed in 15 minutes once accessed. 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 (15min).

- **Connect Readings.** Every lecture will have associated LearnSmart Reading through your McGraw-Hill Connect account. These assignments (and the eBook) can be accessed through Canvas. LearnSmart Reading assignments will be due at the end of each unit. See Canvas for exact due dates. It is HIGHLY RECOMMEDED that you complete the assigned reading BEFORE the associated lecture.
- 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 Assignments. 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.

VIII. Participation Standards

• Study Expectations. Consider using the following statement:

It is usually expected that students will spend approximately 2 hours of study time outside of class for every one hour in class. Since this is a 4-unit class (6 hrs/week), you should expect to study an average of *at least* 12 hours outside of class each week. Some students may need more outside study time and some less.

IX. 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.

TENTATIVE SCHEDULE*

DATES	Lecture	Lab	LearnSmart Reading** (Ch)	Other
Week 1	Course Intro Science of Biology	5		Quiz #1
Week 2	Biological Molecules	4: Chemical Comp of Cells	2	
Week 3	The Cell	5: Cell Structure and Function	3	Quiz #2
Week 4	Human Body Organization and Homeostasis	6: Body Tissues	4	Quiz #3
Week 5	Lecture Exam (Ch 1 – 4) The Cardiovascular System8: Cardiovascular System		5, 6	
Week 6	The Immune SystemSpread of Infectious DiseaseThe Respiratory System11: Homeostasis		7, 8, 10	Quiz #4
Week 7	The Urinary System The Digestive System	Lab Practical	11, 9	Quiz #5
Week 8	Lecture Exam (Ch 5 – 11) The Skeletal System The Muscular System	12: Musculoskeletal System	12, 13	
Week 9	The Nervous System Sensory/Special Senses	13: Nervous System and Senses	14, 15	Quiz #6
Week 10	The Endocrine System14: Reproduction and DevoThe Reproductive System14: Reproduction and Devo		16, 17	Quiz #7
Week 11	Lecture Exam (Ch 12 – 17)	7: Organization of the body; Pig Dissections		
Week 12	Mitosis and Meiosis	15: Mitosis and Meiosis	19, 20	
Week 13	Genetics	16: Genetics	21	Quiz #8
Week 14	DNA Structure and Function Biotechnology	L'/ LIN A and Riotachnology		Quiz #9
Week 15	Evolution and Biodiversity	18: Human Evolution	23, 24, 25	Quiz #10
Week 16	Lecture Exam (Ch 19 – 25)	Lab Practical		-
Week 17	Final Exam Review	Case Study Presentations		
Week 18	Final Exam - Cumulative			

* For detailed daily schedule, including assignment due dates, ect, see Unit Schedules on Canvas.

** LearnSmart Readings: Check Canvas and your Connect accounts for the exact sections you are required to read and complete

Other Important Dates:

- Final Drop Date to avoid "W": January 26th
 Final Drop Date (with "W"): March 9th