

Biology 20-29687 Human Anatomy**Instructor Information:**

Andrew Strankman

Office Hours: By appointment

Email:

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REEDLEY COLLEGE

Semester: Fall 2014

Course Information:

Day: Tuesday/Thursday

Time: 6:00-8:50pm

Room: LFS 17

Course Description: Biology 20 is a 4 unit course on Human Anatomy. This course provides the basic understanding and working knowledge of the human body with the emphasis on the structure and function of the body at several levels: cellular, tissue, organ, system, and organismal.

A foundation course in Human Anatomy. A systems-based approach, examining the gross and microscopic structures of the human body. Fulfills the anatomy requirement for many nursing and other health-related programs. (CAN BIOL 10) (A, CSU-GE, UC, I)

Subject Prerequisites: Completion of Biology 1 or Biology 5 or Biology 11A or 11B

Basic Skills Advisory: College chemistry course or equivalent and following the recommended course sequence.

Required Materials:

1. **TEXTBOOK:** Martini, Timmons & Tallitsch, Human Anatomy, 7th Edition, Pearson Benjamin Cummings.
2. **LAB MANUAL:** Lab Manual for Human Anatomy (2nd Edition, by Eckel)
 - a. **NOTE:** Lab Manual Rentals are NOT acceptable or allowed.
3. **Scantrons:** 882E or 886E (x6)
4. **Notebooks:** Lecture and Lab Notebooks: Full size (and something to write with)
5. Check your emails and blackboard account regularly for announcements, reading materials and assignments, and any changes in the syllabus. All lecture and lab handouts, lecture notes, course schedules will be posted on Blackboard. Visit <http://blackboard.reedleycollege.edu> and use your student ID number as both the user name and password to enter your account.

Course Objectives:

1. Identify the structure and function of each anatomical system
2. Develop important critical thinking skills as they evaluate lecture topics and laboratory observations
3. Learn how to use the scientific method
4. Develop important manual dexterity skills

5. Satisfy a basic requirement for a variety of biological, medical, physical, education, and health oriented programs

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

1. identify the basic structure and function of each human system.
2. explain the cell membrane potential and how it becomes an action potential.
3. describe the autonomic nervous system using neurotransmitters and receptors.
4. identify the major endocrine glands and the hormones they secrete.
5. discuss the types of blood cells and their function.
6. demonstrate use of electrocardiograph and identify normal readings.
7. explain the functions of the lung and kidneys.
8. demonstrate critical thinking to perform laboratory experiments and demonstrations.

Assignments/Evaluations:

Assignment Name	Number	Value	Total
Lecture Exams	3	100	300
Lecture/Lab	10	20	200
Quizzes			
Lab Exams	3	100	300
Lab Reports	15	15	225
		Total	1025

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

Notes:

- i) In this class grades are earned they are not given therefore students will receive a grade representative of the effort of work they have put into the class. There will be NO extra credit, rather focus on learning the material as it stands.
- ii) ALL completed exams and scantrons will be kept by the instructor! If you leave the classroom in possession of a test copy or scantron this is grounds for dismissal from the course with the grade F.

Assignments Continued:

1. Lecture Exams: At the instructors choosing lecture exams may be composed of any mixture of the following types of questions: multiple choice, matching, fill-in,

short answer, or essay questions. Dates for lecture exams can be found in course schedule.

2. Lecture/Lab Quizzes: At the instructors choosing quizzes may be composed of any mixture of the following types of questions: multiple choice, matching, fill-in, short answer, or essay questions. Quiz dates will not be announced and will occur randomly through the term in both lecture and laboratory. The instructor reserves the right to give extra quizzes for the purposes of replacing low scores if he chooses to do so.
3. Laboratory Exams: At the instructors choosing laboratory exams may be composed of any mixture of the following types of questions: multiple choice, matching, or fill-in questions. Exams may vary in total number of questions however point totals will remain 100.
4. Lab Reports: Lab Reports (from the assigned section of the lab manual) are due in each successive lab period at the beginning of the lab period. All work is due on the assigned date. **NOTHING WILL BE ACCEPTED AS LATE WORK!**
 - a. Lab report pre-labs: Pre-labs are to be completed before the meeting of the actual laboratory. If the appropriate pre-lab is not completed before the lab period is set to begin students may be asked to leave the class.

Tests: There are no makeup exams for missed tests. NO EXCEPTIONS!

Final Exam: A two-hour comprehensive final exam worth 1 test will be given at the end of the semester during finals week. You are required to take the final exam. The final exam will be weighted the same as the other exams in the course and will be cumulative.

Where to find your Grade: Grades will be available via blackboard within 1 week of the assignment due date. Additionally hard copies of most assignments will be handed back for students to keep (NOTABLE EXCEPTION TO THIS IS ALL EXAMS ARE THE PROPERTY OF THE INSTRUCTOR)

Attendance Policy:

1. Students are expected to attend all class sessions. Sign in sheets will be used and each student must sign in only for themselves.
2. Students are expected to be on time, and be in class the entire class session.
3. Calling or emailing me to tell me you won't be in class does NOT excuse you.
4. Excessive unexcused absences of 9 hours of lab and or lecture (prior to the drop date), lack of participation, etc. may cause the student to be dropped from this course. Excessive tardies will NOT be tolerated (3 tardies= 1 absence). It is IMPERITIVE that you arrive on time to laboratory as the first 30-60 minutes are the lab introduction. All special announcements are made during the first 10-15 minutes of class. If you miss 9 hours or more of this class after the 9th week it may result in the lowering of your grade by one letter grade.
 - a. Class Disruption: NO cell phones, tablets or any form of electronics are to be used inside this classroom. If they ring or are used during a quiz

or test the student will receive a 0 for that exam or quiz. You cannot make up these assignments. No cell phones etc maybe on your person during a quiz or exam. You are responsible for downloading the lecture outlines prior to class. These are to be used for the lecture.

b. Note this is for your own safety!

Cancelled Class Policy: In the unlikely event that class must be canceled, you will be notified as early as possible via an email from myself and potentially from Reedley College. Reedley College makes every effort to post signage on the door to announce class cancelations. Given that many students commute in for the course, great pains will be taken to ensure students are adequately forewarned.

Classroom Guests: Do not bring guests to class, the room has a finite number of seats, and enrollment will fill them all. As a result we cannot accommodate any guests in the classroom.

Accommodations or Special Needs Requests: If you have a verified need for an academic accommodation or material in alternate media (ie Braille, large print, electronic text, etc) per the Americans with disabilities act (ADA) or SECTION 504 of the Rehabilitation Act, please contact me ASAP.

1. Additionally if you are or may become pregnant during the course of the class or have any other medical disease or defect which may affect you during the class please make me aware ASAP so appropriate measures can be arranged.

Academic Integrity: Students at 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 the responsibility to ensure that this 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.

Cheating: is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism: is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the

contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights. Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

Lecture and Lab Schedule:

Note: the instructor reserves the right to change or modify this schedule as needed during the semester.

Dates	Topic/Lab	Text Reading
Week 1	8/12 (Tu)	Lecture: An introduction to Anatomy
	8/14 (Th)	Lab #1: Intro to the Human Body
Week 2	8/19 (Tu)	Quiz #1 Lecture: The Cell Mitosis and Meiosis
	8/21 (Th)	Lab #2: Use of the Microscope Lab #3: Anatomy of the Cell & Cell Division
Week 3	8/26 (Tu)	Quiz #2 Lecture: Histology and Integument
	8/28 (Th)	Lab #4: Tissues Lab #5: The Integumentary System
Week 4	9/2 (Tu)	Quiz #3 Lecture: The Digestive System
	9/4 (Th)	Lab #26: The Digestive System
Week 5	9/9 (Tu)	Quiz #4 Lecture: The Urinary System
	9/11 (Th)	Lab #27: The Urinary System
Week 6	9/16 (Tu)	Lecture Exam 1
	9/18 (Th)	Lab Exam 1
Week 7	9/23 (Tu)	Lecture: The Skeletal System
	9/25 (Th)	Lab #6: Organization of the Skeletal System Lab #7: The Axial Skeleton Lab #8: The Appendicular Skeleton
Week 8	9/30 (Tu)	Quiz #5 Lecture: The Muscular System
	10/2 (Th)	Lab #10: Organization of the Skeletal Muscles Lab #11: Axial Muscles Lab #12: Appendicular Muscles
Week 9	10/7 (Tu)	Quiz #6 Lecture: Articulations
	10/9 (Th)	Lab #9 Articulations
Week 10	10/14 (Tu)	Quiz #7 Lecture: The Endocrine System
	10/16 (Th)	Lab #20: The Endocrine System
Week 11	10/21 (Tu)	Quiz #8 Lecture: The Reproductive System
	10/23 (Th)	Lab #28: The Reproductive System Lab #29: Development
Week 12	10/28 (Tu)	Lecture Exam 2
	10/30 (Th)	Lab Exam 2
Week 13	11/4 (Tu)	Lecture: The Nervous System
	11/6 (Th)	Lab #13: Organization of the Nervous System Lab #14: The Spinal Cord and Spinal Nerves Lab #15: Anatomy of the Brain
Week 14	11/11 (Tu)	Veteran's Day No Class

	11/13(Th)	Quiz #9 Lecture: The Cardiovascular System Lab #21: Blood Lab #22: The Heart Lab #23: The Systemic Circuit	
Week 15	11/18 (Tu)	Quiz #10 Lecture: Special Senses	Ch 20, 21, 22
	11/20 (Th)	Lab #17: Special Senses: Olfaction and Gustation Lab #18: Anatomy of the Eye Lab #1: Anatomy of the Ear	
Week 16	10/25 (Tu)	Quiz #11 Lecture: The Respiratory System and Lymphatic System Lab #25: The Respiratory System Lab #24: The Lymphatic System	Ch 24, 23
	10/27 (Th)	Thanksgiving No Class	
Week 17	12/2 (Tu)	Final Exam Review	
	12/4 (Th)	Lab Exam 3	
Week 18	12/9 (Tu)	Final Exam (Cumulative) 6:00-8:00PM	

Important Dates:

August 11 th	Semester Begins
August 22 nd	Last day to drop for full refund
August 29 th	Last day to register or to drop and avoid a 'W'
October 10 th	Last day to drop period
November 11 th	Veteran's Day (No Class)
November 27-28 th	Thanksgiving Break
December 8 th -Dec 12 th	Final Exam Week

Successful Anatomy Students:

A. There is a massive amount of memorization that must be done in this course! College students are expected to spend 2-3 hours per class hour outside the classroom studying; that translates to 12-18 hours per week for this course, excluding test study time. Some of this time, especially for the labs, should be completed prior to the class. Get rid of distracting elements such as TV, iPods, MP3s, friends, roommates, spouses, and children. Log your time (don't count breaks)...you'll be surprised.

B. Listen in lecture and take good notes using my outlines from blackboard (you may use a tape recorder during lecture if you wish). Organize your notes and redo them if necessary. You may want to take notes in your text during the lecture. Review your notes frequently, not just before a test. Please feel free to contact me if you are having difficulties.

C. Do your reading assignments prior to the lecture on that particular topic. Read your labs prior to the lab period, partially complete the lab report, and then verify your answers during the lab.

D. Keep a vocabulary list of all terms mentioned in lecture, in bold print in the text, or listed at the end of each chapter. Know the meaning of each of these terms and the correct spelling.

E. Spend some time studying each day. Review notes for 15-30 minutes at one time. Reading assignments are best done by spending an hour or two at one time. Don't try to complete your study hours all in one sitting or on the same day, as your efficiency will drop dramatically. Review an additional 3-5 hours prior to examinations

F. Form study groups to work together. Make your own review sheet or, if you work in a study group, have each person make a review sheet for a chapter and then teach each other.

G. Use the interactive PowerPoints available on blackboard or photograph the models and label the photos. Make flashcards to test yourself or your study group.

H. Use all materials available (text, CD, internet sites, etc.); if one study method does not work try another! **STAY HEALTHY!**