

## **Biology 20 –Human Anatomy #50156**

### **Course Description and Tentative Schedule Fall 2013**

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#### **I. COURSE DESCRIPTION**

A. Course Number: 50156; 4 Units

Lectures are T, 1:30-2:45 pm; T, 2:55-4:10 pm LFS Room 11

Labs are F 1:30-2:45 pm LFS, F 2:55-4:10 pm LFS Room 17

**Your course ID code (#50156) must be on all papers, exams, and assignments.** E.g., John Doe 50156

B. Prerequisites: Biol 1 or Biol 5 or equivalent with grade of 'C' or better, taken in the last five years.  
Eligibility for ENGL 125, 126, or 153; or ESL 67 and 68 recommended.

C. Objectives: students completing the course will have a basic understanding of anatomy through lecture and lab work using models, dissection, and histology. Human structure and function will be the major focus of the class. "This is a course providing a basic understanding and working knowledge of the human body with emphasis on the structure of each major system. The interrelationship between human systems and the relationship between structure and function of each system will be studied at several levels: cellular, tissue, organ, system, and organismal." It is especially useful for those students planning a career as a nurse, physician's assistant, nurse practitioner, laboratory technician, radiologist, nuclear medicine technologist, inhalation therapist, medical office assistant, medical record keeper, dental hygienist, physical therapist, surgical assistant, diagnostic medical sonographer, mortician, cytotechnologist, EEG technologist, paramedic, and also students in premedical, pre-dental, physical education, sports medicine, nutrition, and pre-chiropractic programs. This course requires an excellent grasp of the English language, time to commit many facts to memory, and a great deal of study time. **DISSECTION OF EYEBALL AND HEART MAYBE REQUIRED OF THIS COURSE.**

#### **II. REQUIRED MATERIALS**

**Lecture:** Text: Martini, Timmons, & Tallitsch, Human Anatomy, 7<sup>th</sup> Edition, Pearson Benjamin Cummings.

**Lab:** Manual: Christine M. Eckel, Human Anatomy Laboratory Manual, 2th Edition, McGraw Hill (Bookstore Reedley College Edition)

Scantrons: 882E or 886E (x8)

Quizstrips: (x10)

Lecture and Lab Notebooks, full size

Your attention and your brain!

#### **Optional (but highly recommended) materials:**

Any medical spelling book such as Webster's Medical Speller (2<sup>nd</sup> ed.) or any medical dictionary which may be used during labs (not during tests) might be useful.

Goggles should be worn during dissections.

**III. NO FOOD, BEVERAGES, CELLULAR PHONES, PAGERS, OR PROFANITY AT ANY TIME!** Please respect other students. Professional behavior is expected at all times. I am aware that emergencies arise, but place your electronics on silent or “manner” mode.

**IV. ATTENDANCE AND DROP/ADD POLICY**

Your success in this course requires that you be *on time and here* for each lecture and lab. Excuses for absences will be honored at my discretion. Most announcements will be placed on Blackboard, but find a “buddy” in class to inform you of any announcements that might be made during your absence. I will drop students (both enrolled and waitlisted) based on the following policy:

1. Student does not attend the first lecture and/or student does not attend the first lab.
2. Student misses a cumulative 4 hours (lecture or lab) in the first three weeks.
3. Student misses 6 hours (lecture or lab) up to drop date without providing an excuse. Written excuses for absences will be honored at my discretion.

HOWEVER, you are responsible for dropping yourself from the class if you wish to do so. Do not rely on my paperwork skills should you decide to no longer attend the course, and I will be forced to give you a grade (usually an “F”) if you stop attending after the 9 week drop date.

Participation in class, especially laboratory activities, is critical for maximizing learning and successful completion of the course. Regular roll will be taken and excessive absences may result in you being dropped from the course. A student not present at time of roll-call will be considered absent; roll-call may be taken at any time during the class period. In result, 3 absences will correlate to a reduction of one full letter grade and 6 or more absences will result in you being dropped from the course. You are responsible to see the instructor after class to confirm your attendance, if you are late to class.

If several different but important activities occur during a class session, multiple roll calls may be recorded to document who was present during the important activity. If you choose to leave early, that may be noted on the roll sheet. The class may have a waiting list; therefore anyone **absent or late** from either a lecture or lab will be dropped from the roster and replaced by the next person on the waiting list. This process will continue until either the last day to register has passed or until no students remain on the wait list. Additional students will/may be added to the wait list during this time. Wait-listed students will be dropped from the wait-list with their first absence and/or tardy. A student dropped from the wait list due to an absence or tardy, may be reinstated to the bottom of the wait list. Attendance by wait listed students will not be permitted after the last day to register.

**V. LATE ASSIGNMENTS, CHEATING, AND MAKE-UP POLICY**

Any assignment turned in late may receive a penalty. **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 your instructor.

**Lab Exams can NOT be made up. Period.** If you miss a Lab Exam, you forfeit those points. You may, at my discretion, make up ONE Lecture Exam if you miss it due to extreme circumstances. You **MUST** email me your explanation, and any other missed exam will receive a score of 0. You may make up lab reports the first day you attend class after your absence. Pop quizzes, if given, may not be made up.

Any student caught cheating will be subject to the Willow International Center 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.

**VI. TESTS AND EVALUATION**

A. Grades

<u>Description</u>	<u>Possible Points</u>
3 Lecture Exams (100 points each)	300
12 Lab Reports (15 points each)	180
3 Lab Practical Exams (100 points each)	300
8 Lab Quizzes (10 points each)	80
Lecture Final	<u>200</u>
Total points	1,060

The grade you receive for the course will be based on the following scale:  
90% + = A    80-89% = B    70-79% = C    60-69% = D    59% and Below = F

At my discretion, the scale may be modified downward with the following curve, where X = the Course Mean and SD = the Standard Deviation of the Course Mean. Also at my discretion, the scores of students who do not take all the tests or do not submit all the assignments may be dropped from the calculation of the mean and standard deviation, if inclusion excessively lowers the mean or expands the standard deviation and would therefore skew the curve.

$$A = X + (1.25 * SD) \quad B = X + (0.25 * SD) \quad C = X - (0.5 * SD) \quad D = X - (1.25 * SD)$$
$$F = (47\% \text{ or less})$$

The curve will be calculated on the total course scores at the end of the term for **all** students and will be based on the total points earned for each student. It may be modified if the curve for the semester is abnormally high or low in relation to previous semesters. I reserve the right to modify/lower the final grade curve such that each student receives an equal benefit.

Class standing can change dramatically depending on how the mean and standard deviation changes with the addition of subsequent scores. Generally, the mean goes up as a few students drop the course prior to the last drop date or if several students do not have valid excuses to take make-up tests. Often there is a greater change in the standard deviation than the mean, which will affect students just above or just below a cut-off point.

FYI, in the recent past the final course grade has not been curved because of the high student scores. Therefore, do not count on the curve to be helpful.

B. Lecture exams will be multiple-choice with approximately and may contain 1-2 short-answer or essay questions based on the main objectives of each chapter. Variable amounts of extra credit will be given on lecture exams. Please note that I require correct spelling and grammar. If I can't read it, I can't grade it! Write neatly!

C. Lab exams will be practical based on the work done in the laboratory. They may include multiple choice and short answer questions. *Quizzes* will consist of questions concerning the previous labs/lectures and/or the current day's lab/lecture. Sometimes there maybe additional bonus questions! Please see B above for spelling, grammar, and neatness!

D. Students are encouraged to work together in groups during labs; however, each student is expected to complete their lab reports individually. Students who copy answers from lab their partners generally fail the lab tests. I will attempt to return corrected labs the lab period after they have been received so that corrected labs may be available for study purposes. Each lab report will be worth 15 points.

NOTE: Many students ignore the models. I guarantee that most of the models will be on the lab tests. One of the primary purposes of the lab is to train your eye so that you can recognize a structure whether you are seeing it in a book, a color plate, a model, or a dissection. The students that do well in the course spend the last 1 to 1.5 hours of each lab with the models. The students that fail the course leave after 1 to 1.5 hours. I have no sympathy for students who do not do the work.

**Students are to report any injury or accident that occurs in the lab to me immediately. Wear appropriate clothing to lab; open toed shoes will not be allowed. If I notice anyone with open toed shoes in the lab, I will immediately ask that person to leave the lab room.**

## **VII. BLACKBOARD**

All lecture, study guides, course schedules, and announcements are available on blackboard. Use your student ID number as both the user name and password to enter your account. I will have interactive PowerPoint slides on blackboard that may be used in your exams. The first slides have no labels and the following slides are marked. Please use these to study for lecture exams and practicals.

## **VIII. COURSE OBJECTIVES AND OUTCOMES**

- A. Course Objectives: In the process of completing this course, students will:
1. identify the basic structure and function of each human system at the macroscopic and microscopic levels.
  2. develop important critical thinking skills as they evaluate lecture topics and the results of laboratory demonstrations and experiments.
  3. learn how to use scientific methods.
  4. develop important manual dexterity skills associated with dissections, free-hand drawings, completion of anatomical color plates, and the operation of microscopes, computers, and other laboratory equipment.
- B. Course Outcomes: Upon completion of this course, students will be able to:
1. identify the major body systems at the macroscopic and microscopic levels. For example: nursing students will be able to function in an emergency room or ward and know the location and function of the heart, liver, skin, brain, etc. as well as critically analyze what is abnormal in each case.
  2. critically analyze and deductively reason out each clinical case as it relates to human organs and organ systems. For example: radiology techs will be able to understand if the doctor orders a transverse section of the thoracic cavity and deduce the extent of images and nurses will be able to understand clinical tests and their interpretations.
  3. Follow steps outlined in the scientific method in each clinical situation that arises: For example: an elevated temperature requires reporting to the doctor; follow up with tests to find the reason, and finally the administering of appropriate treatment under the direct supervision of a doctor.
  4. Handle equipment appropriate to each clinical setting: microscopes, computers, and other laboratory equipment. Each allied health field would have their own specific equipment.
  5. function in any allied health field (such as nursing, dental hygiene, radiology technology, researcher, etc.) utilizing their foundation of human anatomy and function.
  6. Satisfy a basic requirement for a variety of biological, medical, physical education, and health-oriented programs.

NOTE: If you should experience difficulty understanding the material presented in the course, it is your responsibility to see me at the earliest possible time.

## **IX. HOW TO BE SUCCESSFUL IN THIS COURSE**

- 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!**

## **X. OTHER INFORMATION (ACADEMIC ACCOMODATIONS)**

Academic dishonesty is unacceptable and will not be tolerated by Reedley College. Cheating, plagiarism and collusion in dishonest activities erode the college's educational and social role in the community.

Cheating is the act of deception by which a student misleadingly demonstrates that he/she has mastered information on an academic exercise. Examples include but are not limited to:

1. Copying or allowing another to copy a test, paper, project, or performance.
2. Using unauthorized materials during a test, for example, notes, formula lists, or "cheat sheets."
3. Taking a test for someone else or permitting someone to take a test for you.

Disciplinary Procedures are outlined in your Reedley College student catalog and are summarized as follows when a faculty member discovers a violation:

1. Conference with student to address allegations
2. Notification of division dean, report for permanent record of student.
3. May give student "F" for assignment or course.
4. If more than one infraction has occurred, the student may go on probation, be suspended, or expelled. An appeal may be made within 15 days of notification.

If you have a verified need for an academic accommodation or material 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.

## X. TENTATIVE SCHEDULE

Please bring your textbook to lecture and your textbook and lab manual to every lab. Required assignments or tests are in bold. Additions or changes will be announced in class and posted on blackboard.

<b>Week</b>	<b>Dates</b>	<b>Lecture (Book Chapter) -Tuesdays</b>	<b>Lab (Manual Chapter) - Friday</b>
1	8/13-8/16	Introduction, Surface Anatomy and Cross-Sectional Anatomy (1,12)	The Language of Anatomy/Organ System Overview Orientation of the Human Body (2) Review Operation and Care of Microscope (read only) (3) Cellular Anatomy (4) Interactive Powerpoint (IP): Gitorso, GIorgans, lungheartlarynx  <b>PL pp. 31-33</b> <b>PL pp. 57-58</b>
2	8/20-8/23	Foundations: The Cell, Tissues and Early Embryology (2,3)	<b>Quiz #1: Language of Anatomy, Organ System Overview</b> Histology (5) The Integumentary System (6) Classification of Covering and Lining Membranes IP: Integument  <b>PL pp. 85-87</b> <b>PL pp. 101-104</b>
3	8/27-8/30	The Integumentary System, The Skeletal System: Osseous Tissue and Skeletal Structure (4,5)	Overview of the Skeleton: Classification & Structure (7) (no dissection exercises 7.4) The Axial Skeleton (8) <b><u>Models starting from this lab</u></b>  <b>PL pp. 117-120</b> <b>PL pp. 147-148</b>
4	9/3-9/6	<b>First Lecture Exam</b>	<b>PRACTICAL EXAM #1, 100 points</b>
5	9/10-9/13	The Skeletal System: Axial Division, Appendicular Division, Articulations (6,7)	<b>Quiz #2: Skeleton: Classification, Structure, and Axial</b> The Appendicular Skeleton (9) The Fetal Skeleton (power-point)  <b>PL pp. 179-180</b>
6	9/17-9/20	The Skeletal System: Articulations, The Muscular System: Skeletal Muscle Tissue and Organization (8,9)	<b>Quiz #3: The Appendicular and Fetal Skeleton</b> Articulations and Body Movements, emphasis: knee, shoulder, hip (10)  <b>PL pp. 193</b>
7	9/24-9/27	Axial Musculature, Appendicular Musculature, (10,11)	<b>Quiz #4: Articulations and Muscle Histology</b> Muscle Tissue and Introduction to Muscular System (11) Axial Muscles (12) Appendicular Muscles (13) IP: arm, halfhead, Major muscles body, Muscular Leg  <b>PL pp. 209-210</b> <b>PL pp. 239-240</b> <b>PL pp. 271-272</b>
8	10/1-10/4	<b>Second Lecture Exam</b>	<b>PRACTICAL EXAM #2, 100 points</b>
9	10/8-10/11	The Nervous System: Neural Tissue, Spinal Cord and Spinal Nerves (13,14)	Histology of Nervous Tissue Nervous Tissue (14) Central Nervous System (15) (No Brain Dissection) Cranial Nerves (16) IP: Brainsmall, brainventricles, headmidsagittal, Neuron, Synapse  <b>PL pp. 285-286</b>

			<b>PL pp. 311-313 (Q1,2,3)</b> <b>PL pp. 331-334 (Q1,3,4,5,6)</b>
10	10/15-10/18	The Nervous System: Sensory & Motor of Spinal Cord, The Brain & Cranial Nerves (15,16)	<b>Quiz #5: Neurology: Histology, CNS and Cranial nerves</b> Spinal Cord and Spinal Nerves (17) Special Senses (18) <b><u>-Cow/Sheep eye dissection (If available) -</u></b> IP: as above lab 7, add: nervous system, spinal cords  <b>PL 351-353</b> <b>PL 379-382</b>
11	10/22-10/25	The Nervous System: ANS, General & Special Senses (17,18)	<b>Quiz #6: Spinal Cord, ANS and Special Senses</b> Endocrine System (19) Blood (20) Heart (21) <b><u>-Cow/Sheep heart dissection (If available)</u></b>  IP: cerebral arterialcircle, heart and fossaovialis, heartmodel, hearttorso, hearttracheaBI, heartwithfossaovialis, lungheartlarynx  <b>PL pp. 399-400</b> <b>PL pp. 411</b> <b>PL pp. 431-433</b>
12	10/29-11/1	The Endocrine System, The Cardiovascular System: Blood (19,20)	Vessel and Circulation (22) Lymphatic System (23) Respiratory System (24) (Will try to start) IP: headmidsagittal, large larynx, larynxsmall, lungheartlarynx, stomachmodel, duodenumpancreas, GIorgans, GIwall, Gtorso  <b>PL pp. 471-474 (Q1,2,4,9,10,11)</b> <b>PL pp. 493-494 (Q1,7,8,11)</b>
13	11/5-11/8	<b>Third Lecture Exam</b>	Respiratory System Digestive System IP: headmidsagittal, large larynx, larynxsmall, lungheartlarynx, stomachmodel, duodenumpancreas, GIorgans, GIwall, Gtorso  <b>PL pp. 515-516</b> <b>PL pp. 543-544</b>
14	11/12-11/15	The Cardiovascular System: Heart and Vessel/Circulation (21,22)	<b>Quiz #7: Lymphatic, Respiratory &amp; Digestive</b> Urinary System Reproductive System IP: urinarymodels, Gtorso, kidneymodel, kidneystructure  <b>PL pp. 563-566</b>
15	11/19-11/22	The Lymphoid System and The Respiratory System (23,24)	<b>Quiz #8: Urinary, and Reproductive</b> Finish Reproductive System  <b>PL pp. 593-596</b>
16	11/26-11/29	<b>The Digestive System and The Urinary System (25,26)</b> <b>11/29 – No Lab</b>	<b>Thanksgiving</b>
17	12/3-12/6	The Reproductive System	<b>Practical Exam EXAM #3, 100 points</b>
18	12/10-12/13	<b>Final Exam (Cumulative) 1:00-2:50pm</b>	<b>No - Lab</b>

