BIOLOGY 140 — HUMAN ANATOMY Class# 9337 — 5 units

CUYAMACA COLLEGE

M/W 8:30am - 12:45 pm; Building H Room 207 Professor Greg Brulte D.D.S.
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IMPORTANT NOTE When emailing me, put your name and class (Bio 140) in the subject. I get a lot of viruses over the school email. If I don't recognize your email, I will delete it!

Course Description

Students will embark on a study of the systems of the human body. This is accomplished through a study of the organization of the body's systems from a microscopic level of organization to the gross anatomy level. In addition, the relationship between structure and function will be examined through the study of histological slides, photomicrographs, anatomical models and charts, mammalian (cat) dissection, and human cadaver demonstration.

Anatomy is hard!!! Anatomy requires a lot of memorization. Most of what you will be given in lecture is a lot of terms to memorize, and then you will be given a chance in lab to apply what you have memorized. My advice to you is to work through the CD that came with your book (some on reserve at the library), make flash cards, and join a study group. If you are serious about doing well in this class, then you need to schedule some serious study time outside of class. We're talking about 8 hours of study time outside of class. If you put your study time into your schedule, you will be more likely to actually do it. Waiting to study the night before the class will usually yield very disappointing results.

Course Objectives

- A. To develop knowledge of fundamental principles of body structure at the cellular, tissue, organ, and system level of organization.
- B. To appreciate relationships between structure and function.
- C. To teach the use of <u>precise</u> terminology.

- D. To present the experimental method of observation and encourage critical thinking.
- E. To aid in the understanding of human problems and to contribute to general cultural knowledge.

Student Learning Outcomes:

- A. Use appropriate vocabulary and terminology to effectively communicate information related to anatomy, and demonstrate information literacy skills to assess, evaluate, and use resources in order to stay current in the field of anatomy.
- B. Communicate clearly and in a way that reflects knowledge and understanding of the human body and demonstrates the ability to adapt information to different audiences and applications.
- C. Approach and examine issues related to anatomy from an evidence-based perspective.

Prerequisite:

Completion of a one-semester college-level General Biology course with a lab with at least a "C" grade.

Methods of Instruction:

- A. Lecture presentations The lecture portion of the course will cover concepts in anatomy as explained in the textbook. Lecture material will be a source of the short answer questions and multiple-choice questions on the exams and quizzes
- B. Assigned reading in textbook and use of references The text chosen for this course is an excellent source of information and graphics. Many figures from the text are used during lecture. You are responsible for all the assigned reading material in the book. Material covered in the reading will be a source of short answer questions and multiple-choice questions on the exams. The reading assignments are given in the schedule.

- C. Laboratory dissections (anatomical insights gained from dissecting preserved cats, sheep brains, sheep hearts, and sheep eyes.) Human anatomy can only be learned by working with the specimens (models, charts, cadavers, etc.) with your own hands. Bring your lab manual and text book to class every day. Material covered in the lab manual will be the source of identification and short answer questions for the exams.
- D. Microscope slide study (the histological approach to anatomy).
- E. *Photomicrograph presentations* (gross and microscopic anatomy).
- F. Study of anatomical charts and models.
- G. Human specimen and cadaver observation.

Required Texts:

Martini - Human Anatomy 8th Ed.

Amerman - Expoloring Anatomy in the Laboratory.

Note: There may be another option for the lab manual. I will go over that option on the first day of class. Do not order the Amerman, yet.

Materials Needed for Course:

- Lab coat, shirt, or apron that covers to the wrists.
- Nitrile gloves
- Close toed shoes and long pants or dresses during all class meetings.

Evaluation:

<u>EXAMS</u> – Six exams (worth 150 points each) will be given according to the schedule. Exams will cover information from lecture, reading, and lab up to the day of the exam. The exams will be a combination of short answer, identification, and multiple-choice. Exam six is not a comprehensive test.

Check the schedule today and often for exam dates. Makeup exams will only be considered for extreme documented emergencies or illnesses.

Spelling counts on all exams. One quarter point (1/4) may be

deducted for every misspelled word.

<u>DISSECTIONS</u> – Students will work in groups to dissect:

- a. cat muscles
- b. sheep brain
- c. sheep heart
- d. cat internal organs

QUIZZES - Six quizzes (20 points each) will be given during the semester. Quiz dates are the class before the test date. You are responsible for material discussed in class whether or not it is in the textbook. You are not responsible for textbook material that was not discussed in class. If you are late, you cannot take the quiz. You must take the quiz on the day it is offered. There will be no opportunity to make up a missed quiz. Lowest quiz grade will be dropped.

<u>GRADES</u> – Letter grades will be calculated based on the percentage of total possible points earned.

A 90 - 100%

B 80 - 89%

C70 - 79%

D 60 - 69%

F < 59%

<u>FINAL GRADES</u> – I **CANNOT** give grades over email. Please keep track of your grades with the table at the end of this syllabus.

Students who are on a borderline between two grades at the end of the semester will be subjectively evaluated on their attendance, class participation and attitude, improvement in scores, and quality and completion of dissections.

Note: Instructor may make changes to schedule and grading policy.

<u>ACADEMIC DISHONESTY</u> – ACADEMIC DISHONESTY IS <u>NOT TOLERATED</u> in this class. Examples of academic dishonesty include, but are not limited to: using "cheat notes" during an exam, copying answers of another student, allowing another student to copy your work, either

inside or outside of class; using work from previous semesters, copying from a book, magazine, or brochure when writing a paper, without giving credit to the source, etc. Cheating includes but is not limited to: Giving and/or receiving specific information during the exams. Using any object besides your brain to answer questions on the exams. Changing answers after an exam in order to get re-grades. Any kind of cheating on an exam will result in a zero grade for that exam or an F grade in the course at the instructor's discretion.

Work revealing academic dishonesty will receive a zero "0", and may lead to dismissal from the class with an "F". Disciplinary action as determined by school policy will be instituted.

<u>COURTESY</u> - Please be considerate of your instructors, tutors, and fellow classmates. Courtesy is very important in maintaining a good learning environment. Do not come to class late or "pack up" your books and possessions when getting ready to leave during the last few minutes of class. When a student is asking a question, please refrain from talking while the question is being addressed. These behaviors are disruptive and rude.

In this class all phones must be turned on vibrate and put away off the desktop. If you have an unusual circumstance, please explain it to me <u>before</u> class starts, and special arrangements can be made. If you are using a laptop computer during lecture, please use it only for activities related to the class such as following lecture notes or taking notes. No web surfing or email, etc. during lecture!

A student engaging in disruptive behavior, such as side conversations while the instructor is lecturing, cell phone issues, excessive noise, or any other behavior that obviously interferes with the learning environment, will be warned on the first offense. If the behavior continues the student(s) will be asked to leave the classroom and a disruptive student report will be filed.

This is a laboratory environment, and there is **No Eating** in the classroom. This is a safety issue, so please make an extra effort to comply

<u>Attendance</u> is <u>required</u>. You may be dropped from this course if you exceed four absences.

Tardiness:

Excessive tardiness is defined as arriving late for class or required class activity more than THREE TIMES after the first two weeks of the semester. You will be warned either verbally or in writing concerning this activity. If tardiness continues, you can be dropped from the class. PLEASE BE ON TIME FOR CLASS!

Withdrawal Deadlines: (check your catalogue for dates)

- **Feb 08** Last day to withdraw without the posting of a "W" in your permanent record.
- **April 26** Last day to withdraw without being subject to academic penalty. After this date a "W" cannot be given and you will receive a grade for the course.

<u>Students with Disabilities</u> who may need academic accommodations should discuss options with their professors during the first two weeks of class.

<u>Students who are pregnant</u> or who become pregnant during this course should identify themselves to the instructor. The student should consult and follow the advice of her obstetrician regarding exposure to preservatives during dissection exercises in the anatomy lab. If attendance is not advised, she should be encouraged to enroll in the laboratory after her pregnancy. The following precautions are recommended if continuing in this class:

- Wear a respirator.
- Double glove when dissecting.
- Dissect no longer than an hour at a time and take 15 min breaks each hour to decrease continuous exposure time

If a student has a medical condition such as epilepsy or asthma, inform the instructor and make sure proper medications or inhalers are brought to each and every class.

Help Outside of Class:

<u>OFFICE HOURS</u> – by appointment; email: <u>brulte@rohan.sdsu.edu</u> <u>OPEN LAB</u> – Open Lab hours will be posted as to the availability of the anatomy laboratory for extra hours of study with the aid of an Anatomy Tutor. Students are <u>strongly</u> encouraged to take advantage of this time. The Open Lab hours are to be used for extra study time, NOT as a substitute for your regularly scheduled lab hours. Please be courteous to our Anatomy Tutors. They are there to help you be successful in the class, not to tell you answers. There are no children allowed in the open labs, and please take your cell phone conversations outside.

TUTORING - STEM Center Days/Times TBA

Record of Quiz and Exam Scores:

	Your Score	Total Possible		Your Score	Total Possible
Quiz 1			Exam 1		
Quiz 2			Exam 2		
Quiz 3			Exam 3		
Quiz 4			Exam 4		
Quiz 5			Exam 5		
Quiz 6			Exam 6		

Things to remember:

- Attend class regularly and participate.
- Refrain from conversations while I or one of your fellow students is talking.
- Give me your feedback! Let me know if something I said was unclear. I'll clear it up for everyone!
- Keep all quizzes/exams/assignments that I return to you. If there is a problem with your grade, it is your responsibility to show me the original document.
- If you are struggling with the material, please see me! Sometimes some one-on-one really helps!
- All PowerPoint lectures are on my website. Do not copy the slides word for word during class. I will not slow down and wait for you to copy what is available.
- Get together in small study groups.

- Take advantage of the open labs that are offered during the week.
- If you choose to drop the course IT IS YOUR RESPONSIBILITY TO DO SO!

NOTE: Grading policy and schedule is subject to change at instructor's discretion.

ALSO NOTE: If you are pregnant, or think you are pregnant, talk to me and we will make accommodations as far as the dissections are concerned.

Anatomy Code of Conduct

During class time and open lab

- 1. NO CAMERAS OR CELL PHONES MAY BE USED IN THE LAB! Absolutely no photographs may be taken of the models, charts, etc. in this lab. Cell phones must be used in the hall.
- 2. All models, charts, laminates, etc. are to remain inside the lab and may not be taken into the hall (or home)!
- 3. Reassemble any model you are using before you put it away. When models are left in disarray, students waste several minutes trying to find all the parts they need to study. If we all take care of the models, then no one needs to experience this frustration.
- 4. Return models and their KEYS to their appropriate space when you are done. Ask your instructor if you don't know where the "appropriate space" is.
- 5. Handle models with care. If you break one, tell your instructor immediately and bring him/her the pieces. We can fix it if we know about it and have the parts.
- 6. Do not use your pencil or pen to point at models or charts. They leave a mark that is difficult (or impossible) to clean. Use a pipe cleaner.
- 7. Treat microscopes with great care! Anything that moves on the microscopes does so with a turn of a knob or pinch of a lever. Don't force anything.
- 8. Return microscopes to the appropriate space (# on scope matches # on shelf) and make sure the "arm" of the scope faces out (so you can see the number).
- ABSOLUTELY NO EATING IN THE LAB! I know some of you come directly from work and need to eat, but you must eat outside of the building.
- 10. Drinking (nonalcoholic, of course!) is okay, but you must bring a screw-top container (water bottles, travel mugs, etc.). Do not bring open cans, or flimsy "Starbucks" type coffee cups. If you want coffee during the class, bring a travel mug. You will be helping the environment as well.
- 11. Clean your desk space with Windex before you leave (especially after dissection).
- 12. Clean, dry, and put away dissection tools and trays when done.
- 13. Before you leave the lab, scan the room...is anything left out? Dirty? Disassembled? Please take the time to help your instructor. You have no idea how hard she/he works for you, so please help out by keeping the anatomy room and equipment looking nice.

BIOLOGY 140 — HUMAN ANATOMY

Calendar subject to change

	Introduction to Anatomy	Ch. 1	
	Cells; Tissues	Ch. 2, 3	
	Integumentary System	Ch. 4	
	Quiz 1; Review		
02-11	Exam 1		
	Osseous Tissue	Ch. 5	
	Axial Skeletal System	Ch. 6	
	Appendicular Skeletal System	Ch. 7	
	Articulations	Ch. 8	
	Quiz 2; Review		
03-04	Exam 2		
	Muscular Tissue	Ch. 9	
	Axial Musculature	Ch. 10	
	Appendicular Musculature; Cat Dissection	Ch. 11	
	Quiz 3; Review		
03-20	Exam 3		
	Nervous Tissue; Spinal Cord, Spinal Nerves	Ch. 13, 14	
	Brain, Cranial Nerves	Ch. 16	
	Autonomic Nervous System	Ch. 17	
	Special Senses	Ch. 18	
	Quiz 4; Review		
04-17	Exam 4		
	Blood; Heart	Ch. 20, 21	
	Vessels	Ch. 22	
	Lymphatic System; Endocrine System	Ch. 23, 19	
	Quiz 5; Review		
05-06	Exam 5		
	Respiratory System; Digestive System	Ch. 24, 25	
	Urinary System	Ch. 26	
	Reproductive System; Cat Dissection	Ch. 27	
05-29	Quiz 6; Review		
i	Exam 6	1	