

**HUMAN ANATOMY - Biology 212**  
**Lecturer - Sandra Garver**  
**Lecture Hall - AL-201**  
**Lecture Time - M/W 1:00pm - 1:50pm (sections 1-14)**

Office: LS-221 Phone #: 619-594-8027  
Office Hrs: M 2:00pm - 3:00pm e-mail: sgarver@sunstroke.sdsu.edu  
Tues 11:00am - 12:00pm  
Most Fridays 8:00am – 9:00am & 10:00am - 11:00am (see schedule on office door)

**STUDENT LEARNING OUTCOME:**

Successful completion of this course will allow you to confidently identify the histology, major organs, and body/organ regions of the eleven body systems. This identification will include nerves, blood vessels, superficial body regions, skeletal structures and bones (including specific bone landmarks). You will also be able to identify major muscles, including many muscle origins, insertions, and actions. You will also be able to comfortably communicate using anatomical language. Using the anatomical language, you will be able to apply the anatomical knowledge that you have gained over the semester toward specific and limited clinical situations presented in this course. Friends and family will turn to you for the answers to the mysteries of the human body!

**PREREQUISITES:** This is a **DIFFICULT** and **TIME-CONSUMING COURSE!!** ***NO Whining*** 😞

You are about to enter the world of the human body! It is a large and complex area of study that will require a great deal of dedicated energy and time by you. This course requires a commitment from you that you may not have experienced in your education thus far. The payoff for your hard work, however, can be tremendous!

**Students are expected to have successfully completed Bio. 100, (or an equivalent course).** If you have not completed the required prerequisites, you should take action to drop this course. Your continued attendance in this course demonstrates completion of the required prerequisite. If you do not comply with the prerequisite requirement, you will be given an "F" in the course (*SDSU General Catalog*).

It is YOUR responsibility to make the necessary arrangements (limit work schedule, limit home schedule, limit class load, etc.) that you personally need to allow YOU to be successful in this course. You should make sure that you are educationally equipped and educationally mature enough to handle this type of course! It is NOT my responsibility to sacrifice the integrity of the course to *allow* you to pass. This is one of those courses that will help you to fully understand the phrase, "earning a degree"!

**TEXTS:**

**Required:** Human Anatomy, 6th edition - by F. Martini & M. Timmons  
Lab Manual for Human Anatomy, 5<sup>th</sup> edition - by S. Garver  
Supplement to Biology 212 - by S. Garver  
1/4 Box of non-powdered latex\* gloves (unless latex sensitive)  
*- You may want to share with other students -*

**Recommended:** If ordering the Human Anatomy, 5<sup>th</sup> edition, you may want to add on the  
- **Human Anatomy Practice Anatomy Lab CD** (ISBN: 0321510380)  
Photographic Atlas of Histology, 2nd edition - LeBoffe  
The Anatomy Coloring Book - by W. Kapit and L. Elson  
A Photographic Atlas for the Anatomy & Physiology Lab, 6th edition - Van De Graaff

**ParSCORE™ FORMS:** Red ParSCORE forms will be used for **all** quizzes, homework and exams. You must buy **1** "Enrollment Form" ParSCORE (6" x 11", # F-288-ERI) for official enrollment in this class. You must also buy **20** narrow ParSCORE forms (# F-289-ERI) for quizzes, homework and exams. They are available at the bookstore and must be used with a #2 pencil. **You will need the Enrollment ParSCORE by the second lab meeting.**

**LECTURES:** It is very important that you attend all lectures. Some of the material covered in lecture is also covered in the text or lab. On certain topics, however, I will be covering material that is NOT in the text. These topics are likely to be on the exam. In addition, much of

the quiz material is covered in lecture. I will also randomly choose a day from each unit to display possible essay questions for the exam. You will only receive this added benefit if you attend the lecture, and I will not give out the essay questions after that day. If, on rare occasion, you are unable to attend lecture, make sure you get notes and all pertinent material from a fellow student. **No seat-saving during lecture.** Everyone is seated based on a first-come-first-serve basis, unless you are a student with special needs.

**Use of computers** for note-taking purposes is encouraged. If you use your computer during lecture for personal business (games, non-anatomy related work, etc.) however, **I will ask you to leave the lecture hall.** Also, please do not talk while I am lecturing! It is disruptive to me and to others around you. I frequently hear complaints about loud, disruptive individuals in the lecture hall. If you need to occasionally leave lecture early, please make sure you sit near the exits. If the lecture seems to go too fast, please feel free to tape the lecture.

**While in lecture, please TURN OFF ALL ELECTRONIC DEVICES, especially CELL PHONES!**

**LABORATORY DAY:** The ideal way to learn human anatomy is to work with the specimens (models, charts, cadavers, etc.) with your own hands and mind. It is in the labs that students have the opportunity to ask direct questions! Attendance will be taken regularly to assess student attendance. If you are unable to attend lab, **YOU MUST CONTACT YOUR LAB INSTRUCTOR!** Except in rare circumstances, you are only allowed to attend the lab to which YOU are registered.

All Students must sign a "Student Understanding of Lab Rules - Anatomical Gift" form. Students who have a major or repeated violation of the lab rules / anatomical gift policy may be dropped from the course.

**Each lab instructor will be giving BONUS LAB POINTS to each student (worth up to 20 points) at the end of the semester. These points are based on attendance, participation, and overall effort in lab.**

**In lab, you may only have 3 excused absences** (*doctor's note & prior notification to lab instructor required*). For 1-3 unexcused absences, or any excused absence in excess of 3, 1 point is deducted. 3 points will be deducted for more than 3 unexcused absences. NO bonus lab points will be awarded if you have more than 6 unexcused absences (3 weeks worth of lab time).

If you are late to lab, or if you leave early from lab, 1/2 point is deducted.

Lack of student participation during lab (i.e. sleeping in lab, major or repeated disruption of students, not preparing for lab – usually labeling, or **failure to** follow lab rules) may also lead to deductions in some, or all, of your lab points. These points are given or removed at the discretion of the lab instructor.

**Use of CELL PHONES, PERSONAL COMPUTERS or PORTABLE STORAGE DEVICES, (e.g. MP3 players, IPODs, or PDAs) are ABSOLUTELY NOT allowed in lab.**

**READING:** The text chosen for this course is an excellent source of information and graphics. **YOU ARE RESPONSIBLE FOR ALL OF THE ASSIGNED READING MATERIAL IN YOUR BOOK!** You will be quizzed on the reading material, as well as lecture/lab material, assigned up to (but not including) quiz day (see lecture / reading schedule). Plan to spend **AT LEAST 1-2 hours** or more reading and note-taking most nights (not including lab material).

**FRIDAY REVIEW-LAB:** Laboratory Learning Centers will be set-up on most Fridays (see schedule on bulletin board outside labs). It is staffed by UTAs (undergraduate teaching assistants) to help with basic anatomy questions. The Review-lab, however, is **not** used for *FORMAL INSTRUCTION*. All Anatomy material is available for **self-learning** and review. Please make sure you come prepared with the appropriate books and materials to help you study. **Under no circumstances are photos or videos of cadavers, models, charts, or any other material in the labs allowed.** **This includes CELL PHONE photos!** Based on the contract SDSU has with the provider of the cadavers, **NO STUDENT OTHER THAN SDSU ANATOMY STUDENTS ARE ALLOWED IN THE LABS. NO GUESTS!!** Please be prepared to show your student I.D. and/or class schedule while in the lab.

**QUIZZES:** Ten 10-point quizzes will be administered in your **lab section**. Quiz dates are marked on the “lab schedule” and “lecture / reading schedule”. Questions will be drawn from your assigned reading, lecture, AND lab **up to (but not including) the day of the quiz (or day before for T/Th labs)**. For example, quiz #2 covers reading in chapters 2 and 3, *but not chapter 4*. Chapter 4 information will be discussed in lecture on that quiz day. If I lecture on *new* material that is not in the reading on the day of a quiz, that material will not be included on the quiz. Your lowest quiz score will be dropped at the end of the semester. **THERE ARE NO MAKEUP QUIZZES GIVEN,** and you must take all your quizzes **in your assigned lab section**, or get prior approval to take it in another lab section (excused absences only). ParSCORE NEEDED.

**EXAMS:** Five unit exams will be given during the semester. These exams cover information from **lecture, reading, and lab**. They will be administered in **your lab section**. **NO LECTURE ON EXAM DAY.** The exams will be a combination of short answer, identification, essay, and multiple choice.

**YOU MAY NOT CARRY A CELL PHONE OR OTHER ELECTRONIC DEVICES ON YOUR BODY ON EXAM DAY.** They must be turned off and stored within your backpack or purse. Your pockets must be empty of any, and all, note cards or study sheets. Again, store them in your bag.

On exam day, you will be handed an “Exam Packet” that includes all the pages of the exam. At the end of the exam, *you must return all pages of that “Exam Packet”*. Failure to do so will result in an “F” for the exam, and notification to the Academic Judiciary Committee for possible cheating. *See Cheating Policy.*

All answer keys will be posted in your lab. If you feel a mistake has been made in the grading of the exam, you must re-submit your exam stapled to a “Re-grade Request” form to your lab instructor justifying your answers (with text page #s, or dates of lecture material) within **one week**. No adjustments will be made after this time. **You must take ALL of your exams in your assigned lab section, unless prior approval has been arranged with your lab instructor and me!!**  
ParSCORE NEEDED.

**HOMEWORK:** Your Lab instructor will assign one 10-point homework assignment for each of the **five units** covered. Your Lab instructor will give you more information on assignments and deadlines. ParSCORE NEEDED.

**MAKE-UP POLICY: CHECK THE COURSE SCHEDULE NOW!!**

Students who will be missing a day due to athletics or religious holiday must contact both Sandy and your lab instructor within the first two weeks of school.

**There will be no make-ups on homework or quizzes! NO EXCEPTION.**

These all will be graded as a “zero”.

**Due to the unique nature of the exam practical, there are no make-up exams for Exam #3 or the Final Exam!**

Make up exams are only given to students with a **written statement** from your physician verifying that you were ill at the time of the exam. If you feel you might be absent from an exam, contact your lab instructor to see if it is possible to take the exam in a different lab. This must be arranged prior to your exam, and can only occur once during the semester. **If this is not possible, a make-up exam may be given at a time that is convenient to the course instructor, the lab instructor & the student (except for exam #3 or the final exam).** All make-up exams must be taken before the regular graded exams are returned to all the other students, usually within one week, or it may be delayed until finals week. The make up exams are not the same format (i.e. lab practical format) as the original exam, and may be considered more difficult by some, so make every effort to attend your exams.

In some cases, a student unable to take a make-up exam due to illness may be advised that an “**Incomplete**” in the course is more appropriate for the student. An “Incomplete” is given **ONLY** when the student is passing the course, except for the missing Exam. It is not used as a withdraw. Talk to Sandy or your instructor for advice.

**For additional or continuous information about this course, ALWAYS check Blackboard!!**

**GRADING:** Letter grades will be calculated based on the percentage of total possible points. **There will be no curving or grade adjustments.** The grading scale is a standard 90%, 80%, 70%, etc. Grade Scales are as follows:

89.45 - 100 =	<b>A</b>	67.45 - 69.44 =	<b>D+</b>
87.45 - 89.44 =	<b>B+</b>	59.45 - 67.44 =	<b>D</b>
79.45 - 87.44 =	<b>B</b>	0 - 59.44 =	<b>F!</b>
77.45 - 79.44 =	<b>C+</b>		
69.45 - 77.44 =	<b>C</b>		

## **CHEATING:            *READ CAREFULLY!!!***

Cheating is taken VERY seriously. Not only will the lab instructors and Undergraduate Teaching Assistants notice cheaters, most students who cheat are reported by OTHER STUDENTS!! Students who cheat have lost scholarships and loans, chances for medical school or nursing school, and risked being kicked out of SDSU for cheating in anatomy!! **DON'T RISK IT - IT IS NOT WORTH IT!!**

Cheating includes (but is not limited to):

- **Receiving** any specific information about a specific exam or quiz prior to you taking it.  
*Don't discuss the exam or quiz with students who have already taken it.*
- **Giving** specific information about a specific exam or quiz prior to someone else taking it. *After taking the exam or quiz, don't discuss the exam or quiz with students who have **not** already taken it.*
- **Using** any unauthorized information during an exam. *Don't look at a neighbor's exam or quiz, don't write on yourself or any part of your clothing, don't use cheat-sheets.* Unauthorized information includes the use of CELL PHONES, PORTABLE STORAGE DEVICES, (e.g. MP3 players, IPODs, or PDAs). All note cards and study sheets must be stored (you may not have them on your person). These devices are **NOT ALLOWED** during an exam.
- **Plagiarism.** Submitting, as your own, a paper that was authored by another person. This includes (but is not limited to) *written, carbon, Xerox, and computer copies.*
- **Changing answers** after an exam. *Don't try it! We take special care to grade exams carefully and to mark them in such a way as to detect changes made **after** the exams have been returned.*
- **Not returning the entire "Exam Packet"** at the end of the exam. *You are not allowed to leave the room after an exam with ANY PART of the exam packet!!*

**\* CHEATING WILL NOT BE TOLERATED. \***

**If you are caught cheating, or we even suspect it, we WILL report you to the Academic Judiciary Committee. The penalty will be stiff - in the past, this has meant an "F" in the course.**

## TIPS ON HOW TO SUCCEED IN THIS CLASS:

This is a very intense course, requiring a great deal of TIME and EFFORT. There are a few common tricks that may help, however. Here are a few “tips” that may help you to succeed:

- **Attend all lectures and labs.** If you are unable to attend lecture, make sure you get complete notes from a friend. Labs should be made up if possible. You can arrange this through your lab instructor. We also offer Friday Open-Labs to allow you to review information learned in class.
- **Never fall behind!!** This class moves at a very fast pace. It is virtually impossible to catch up if you fall behind. Keep up with all reading and lab assignments. It is recommended that you do NOT simultaneously take anatomy with other heavy courses, such as chemistry, physiology, or other lab courses.
- **Study in small groups.** Studying in groups with other students allows you to get a variety of perspectives on the topics covered. You must know the material quite well to share your own knowledge with those other students in your group. They are also not afraid to speak up if you’ve made a mistake! Historically, students studying together do better in class.
- **Ask questions and attend office hours, if confused!** Many students are reluctant to go to their Lab TA’s or professor’s office hours. Students who come in to clear up misunderstood information invariably do better on tests and quizzes. Sometimes a small bit of confusion can ruin an entire section covered in class. Most lab instructors will be available for questions at some time during most “Friday Open-Labs”.
- **Friday Open Hours.** In addition to the regular set office hours, I also offer "*Friday Open Hours*" on most Fridays. This allows students to come by my office individually, or as study groups, to ask questions. I will often use the labs to help answer questions, or students will drop in from the *Friday Open-Labs* to ask questions. This offers a casual atmosphere for student-instructor interaction. If I am unavailable on Friday, I will post a note on my door.
- **Get tutoring.** If all else fails, private tutors are available to help students in anatomy. These tutors are former students and teaching assistants in anatomy. Names and phone numbers are listed across the hall from LS-225.
- **Library Reserve.** Located within the *Reserved Books* section of the library are former exam "samples", books, supplement material, and "*Bones in a Box*" (individual bones that may be checked out for *temporary* use).
- **Switch-It-Up!!** Many students are disappointed when their grade doesn't reflect what knowledge they feel they have. Frequently, I find that the students have spent a great deal of time studying with a "word list" from the lab manual. They are able to point out the anatomical regions, as long as they have the word-list in front of them! *This is NOT how an anatomy test is given.* YOU must have the word-list in your head, and the labels ("a", "b", "c", etc.) are placed on the anatomical region.

## WEBSITES THAT MAY HELP:

### Websites For General Anatomy:

- [www.thinkanatomy.com](http://www.thinkanatomy.com) (my favorite!)
- [www.innerbody.com](http://www.innerbody.com)
- [www.thedoctorslounge.net/studlounge](http://www.thedoctorslounge.net/studlounge)
- [www.instantanatomy.net](http://www.instantanatomy.net)
- [www.getbodysmart.com](http://www.getbodysmart.com)
- [www.gwc.maricopa.edu/class/bio201/head/head1b.htm](http://www.gwc.maricopa.edu/class/bio201/head/head1b.htm)

### Websites For Mnemonics:

- [www.medicalmnemonics.com](http://www.medicalmnemonics.com)
- [www.eudesign.com/mnems/\\_mnframe.htm](http://www.eudesign.com/mnems/_mnframe.htm)
- [www.technion.ac.il/medicine/Students/Mnemonics.htm](http://www.technion.ac.il/medicine/Students/Mnemonics.htm)

**LECTURE / READING SCHEDULE – Spring 2009**  
***All quizzes and exams taken in LAB!***

<b>Date</b>	<b>Day</b>	<b>Quiz</b>	<b>Topic</b>	<b>Reading</b>
Jan 26	M		Introduction	Ch. 1
Jan 28	W	<b>Q1</b>	Cells	Ch. 2 (no cell life cycle)
Feb 2	M		Tissues	Ch. 3
Feb 4	W	<b>Q2</b>	Integumentary System	Ch. 4
<b>Feb 9/10</b>	<b>M/T</b>		<b>EXAM #1 in lab (no lecture - 2/9)</b>	
Feb 11	W		Bone (Histology, Gross Anatomy & Development)	Ch. 5
<b>&gt;&gt;&gt;&gt; Wednesday, Feb. 11 - LAST DAY TO Add, Drop, Withdraw &lt;&lt;&lt;&lt;&lt;</b>				
Feb 16	M		Muscle (Histology, Gross Anatomy & Contraction)	Ch. 9
Feb 18	W	<b>Q3</b>	Articulations	Ch. 8 (205-215)
Feb 23	M		Axial Division: Musculoskeletal (M/S)	Ch. 6 & 10
Feb 25	W	<b>Q4</b>	Axial Division: Clinical	Ch. 6 & 10
<b>Mar 2/3</b>	<b>M/T</b>		<b>EXAM #2 in lab (no lecture - 3/2)</b>	
Mar 4	W		Appendicular Division: M/S - Upper Limbs	Ch. 8 (215-236), Ch. 7 & 11
Mar 9	M		Appendicular Division: M/S - Lower Limbs	Ch. 8 (215-236), Ch. 7 & 11
Mar 11	W	<b>Q5</b>	Clinical Application / Blood	Ch. 20
Mar 16	M		The Cardiovascular System (Blood / Heart)	Ch. 20 & 21
Mar 18	W	<b>Q6</b>	Cardiovascular System (Heart/Vessels)	Ch. 21 & 22
Mar 23	M		The Lymphatic System	Ch. 23
<b>Mar 25/26</b>	<b>W/Th</b>		<b>EXAM #3 in lab (no lecture – 3/25)</b>	
<b>SPRING BREAK (no class - 3/30 – 4/3)</b>				
April 6	M		Nervous System: Neural Tissue & The Brain	Ch. 13
April 8	W		Brain / Cranial Nerves	Ch. 15
April 13	M	<b>Q7</b>	Spinal Cord / Spinal Nerves & Autonomic NS	Ch. 14 & Ch. 17 (451-464)
April 15	W		Autonomic NS & Special Senses	Ch. 17 (451-464) & 18
April 20	M	<b>Q8</b>	The Endocrine System	Ch. 19
<b>April 22/23</b>	<b>W/Th</b>		<b>EXAM #4 in lab (no lecture – 4/22)</b>	
April 27	M		Respiratory System	Ch. 24
April 29	W	<b>Q9</b>	Digestive System	Ch. 25 (655-677)
May 4	M		Digestive System & Urinary System	Ch. 25 (677-692) & 26
May 6	W	<b>Q10</b>	Reproductive System	Ch. 27
<b>May 11/12</b>	<b>M/T</b>		<b>EXAM #5 - FINAL (No lecture – 5/11 ; Time based on lab time)</b>	

## LABORATORY SCHEDULE – Spring 2009

*Lab attendance is essential to the understanding of Human Anatomy. Twenty Bonus Lab points are given for regular lab attendance and participation. Points may be lost for lack of participation, missed labs, arriving late to lab, or leaving early from lab. You are expected to stay for the entire lab period. If work for that day has finished early, you are to use the remaining lab time for review.*

### No lab Thursday, Jan 22nd

Jan 26/27	M/T	Introduction to Anatomy; Whole Body Overview		Lab 1 / 2
Jan 28/29	W/Th	Whole Body Overview; Cytology	<b>Quiz 1</b>	Lab 2 / 3
Feb 2/3	M/T	Histology		Lab 4
Feb 4/5	W/Th	Integumentary System	<b>Quiz 2</b>	Lab 5
<b>Feb 9/10</b>	<b>M/Tu</b>	<b>EXAM #1 (taken in lab // no lecture 2/9)</b>		
Feb 11/12	W/Th	General Skeletal System		Lab 6

>>>> **Wednesday, Feb. 11 - LAST DAY TO Add, Drop, Withdraw** <<<<<

Feb 16/17	M/Tu	General Muscular System		Lab 7
Feb 18/19	W/Th	Articulations & Axial Skeletal System	<b>Quiz 3</b>	Lab 8 & 9
Feb 23/24	M/Tu	The Axial Muscular System		Lab 9 & 10
Feb 25/26	W/Th	Review	<b>Quiz 4</b>	Lab 6 - 10
<b>Mar 2/3</b>	<b>M/Tu</b>	<b>EXAM #2 (taken in lab // no lecture 3/2)</b>		
Mar 4/5	W/Th	The Appendicular Skeletal System		Lab 11
Mar 9/10	M/Tu	The Appendicular Muscular System		Lab 12
Mar 11/12	W/Th	The Cardiovascular System	<b>Quiz 5</b>	Lab 13
Mar 16/17	M/Tu	The Cardiovascular System		Lab 13
Mar 18/19	W/Th	The Lymphatic System	<b>Quiz 6</b>	Lab 14
Mar 23/24	M/Tu	Review		Lab 11 - 14
<b>Mar 25/26</b>	<b>W/Th</b>	<b>EXAM #3 (taken in lab // no lecture 3/25)</b>		

**SPRING BREAK (no class - 3/30 - 4/3)**

Apr 6/7	M/Tu	The Nervous System		Lab 15
Apr 8/9	W/Th	The Nervous System & Special Senses		Lab 15 & 16
Apr 13/14	M/T	Special Senses	<b>Quiz 7</b>	Lab 16
Apr 15/16	W/Th	Endocrine System		Lab 17
April 20/21	M/Tu	Review	<b>Quiz 8</b>	Labs 15 - 17
<b>April 22/23</b>	<b>W/Th</b>	<b>EXAM #4 (taken in lab // no lecture 4/22)</b>		
April 27/28	M/T	The Respiratory & The Digestive System		Lab 18 & 19
April 29/30	W/Th	The Digestive System	<b>Quiz 9</b>	Lab 19
May 4/5	M/T	The Urinary System & The Reproductive System		Lab 20 & 21
May 6/7	W/Th	The Reproductive System	<b>Quiz 10</b>	Lab 21
<b>May 11/12</b>	<b>M/T</b>	<b>EXAM #5 - Final (taken in lab // No lecture 5/11)</b>	<b>- Final -</b>	