

Department of Biological Sciences



College of Natural and Social Sciences Biological Sciences 143 • (323) 343-2050 • FAX (323) 343-6451

Biology 200A – Human Anatomy & Physiology I

Fall Quarter 2009 Syllabus

General Course Information

Instructor

Mr. Robert L Stewart Jr. – Part-time Faculty, Department of Biological Sciences Email Address: <u>rstewar@calstatela.edu</u> Office: BS 120, (323) 343-2084 Office Hours: Monday/Tuesday 9:30am-11:00am Rm BS 120 (**Tuesday - October 13, 2009 is a furlough day for me; I will not be available or on campus).**

Lab Instructors: Ms. Maryam Afifi (Graduate Student); Ms. Phoebe Chan (Graduate Student); Ms. Cheryl Chow (Graduate Student); Mr. Anson Hsin (Graduate Student) *Please see your lab instructors for their contact information and/or office hours.*

Course Description and Meeting Times

This course provides an introduction to human anatomy and physiology for non-science majors. The general objectives of the course are to gain a detailed understanding of the structure and function of the human body; to appreciate the relationship between structure and function; and to understand how various cells, tissues, organs and organ systems work together to maintain homeostasis. To achieve these general objectives, we will study the structure and function of the human body from a systems viewpoint.

The entire Biology 200 course is presented in two quarters. This quarter, we will cover anatomical terminology; homeostasis, cell and tissue structure and function, basic biochemistry and metabolic pathways, the integumentary system, the skeletal system, the muscular system, the digestive system and the urinary system.

Meeting Times: Lecture - Monday, Wednesday and Friday 8:00am-8:50am, King Hall-Lecture Hall 1 (KH-LH1)

Laboratory – M/W or T/Th in room Biological Sciences Room 352

Course Websites

Blackboard/WebCT for Biology 200A – Will contain syllabus, lecture slides (not lecture notes), your progress, and anything else the teaching staff deems relevant to your successful completion of the course.

Also take advantage of the many online resources that the textbooks offer. They are great and very helpful. You can find all sorts of activities to help you in this course in addition to pictures of tissues, models, dissection specimens, quizzes, games, ect.

Suggested Prerequisite/Corequisite: Chemistry 151 Required Textbooks

Lecture: Human Anatomy & Physiology: 8th Edition; E.N. Marieb and K. Hoehn; Benjamin Cummings/Pearson Higher Education 2010.

Laboratory: Human Anatomy & Physiology Laboratory Manual (UPDATE Main Version): 8th/Custom Edition for California State University Los Angeles; E.N. Marieb and S.J. Mitchell; Benjamin Cummings/Pearson Higher Education 2009.

IMPORTANT NOTICE!

Cell Phones (or other electronic devices) are **NOT ALLOWED** to make any sound that may disrupt the learning process. Therefore, please turn your cell phones (or other electronic devices) off or to silent mode prior to entering the classroom. There will be 5 points deducted from your total score whenever your cell phone disrupts the lecture or the laboratory sections of this course. If my phone goes off, then every student receives 5 points. Fair? I think so.

Course Requirements

Attendance

Lecture attendance is very important to the overall progress you can achieve in this course. While I cannot police attendance in such a large course, there are some privileges that come with regular attendance. Any extra credit assignments or in-class assignments (that will be worth points) can only be taken advantage of by the students in attendance on that day. There is no make-up for assignments given in class, no matter what the excuse. There may or may not be a prior announcement made. All extra credit opportunities for the course will be given in lecture only!

Laboratory attendance is also very important to the level of success of this course. You must be enrolled in a lab session, where you will perform experiments, study and manipulate anatomical models and charts, study histological specimens, and view demonstrations relevant to the topics in the lecture material. **The laboratory** section is **NOT** another lecture, it is designed for collaborative, exploratory, and inquiry based learning.

section is <u>**NO1**</u> another lecture, it is designed for collaborative, exploratory, and inquiry based learning. Therefore, come to lab prepared to work (this implies that there is some learning that should be done prior to arriving at lab)!

Grading

You will receive a single grade for the lecture and lab portions of the course. Letter grades will be determined based on the (already curved) grading scale below. You must have at least 507.5 points (50%) to pass the course. The plus/minus grading system will be used. There will be NO makeup exams. Missed exams with a justified, <u>written, valid and verifiable excuse</u> (ie, physician's note) will be prorated based on scores on other exams. The final lecture exam must be taken to receive a grade for the course.

Grading Scale

$A = 954-1015 \ (94\% - 100\%)$	$C = 670-741 \ (66\% - 73\%)$
$A = 893-944 \ (88\% - 93\%)$	C = 629-660 (62% - 65%)
B+= 873-883 (86% - 87%)	D+= 599-619 (59% - 61%)
B = 802-863 (79% - 85%)	D = 538-589 (53% - 58%)
B = 771-792 (76% - 78%)	D-= 507.5-528 (50% - 52%)
C+= 751-761 (74% - 75%)	F = Below 507.5 (Below 50%)

Component	Points in Overall Grade	Worth	Comments
Lecture			People who attend lecture regularly (and who prepare for lecture) usually do well in this course.
Classroom Assessments	100	10pts each	(10) Lecture-based Timed Website quizzes
Midterm Exams	200	100pts each	(2) In class midterm exams; formats may be any or all of the following: multiple choice, short-answer, fill in the blanks, diagramming
Research Paper	50	50 pts	(1) Research Paper. This term
Final Exam	150	150 pts	(1) In class final exam; format may be any or all of the following: multiple choice, short-answer, fill in the blanks, diagramming. 120 points from new material, 30 points cumulative.
Miscellaneous	10	5pts each	(2) Timed Website Assignments on State Budget Closure Days
Total Lecture Points	510		
Laboratory			Attendance in lab helps to grasp the lecture better. Students who take care of business while in lab usually do well in the course.
Laboratory Mini-Practical Exams	75	25 pts each	(4) In lab mini-practical exams; lowest one will be dropped. 25 questions worth 1 point each.
Laboratory Practical Exams	100	50 pts each	(2) In lab practical exams. 50 questions worth 1point each.
Laboratory Review Exercises	230	10 pts each	(23) Pre-lab review exercises (including assigned physioex exercises) due upon entry into each laboratory session (5pts each); (23) Timed Web Quizzes (5 pts each).
Subjective evaluation	100	100pts maximum	Each lab instructor can award these points on a case to case basis. Subjective points will reflect lab attendance, lab collaboration, lab preparedness, lab productivity, lab behavior (including whether you put things back how you found them, cleaning your area prior to leaving lab, level of respect for others, how long you stay in lab, plagiarism, following lab rules, etc).
Total Lab Points	505		
Total	1015 points		Percentage of total points determines the course grade

Late Assignments

Late assignments will have 10% of total possible points deducted for each day late.

Academic Honesty

Students are expected to abide by the University's Academic Honesty Policy, which can be found at <u>http://www.calstatela.edu/univ/stuaffrs/Academic_Honesty.htm</u>. Students who violate this policy will be subject to disciplinary action, and may receive a failing grade in the course for a single violation.

Tape Recorders and Laptops in Lecture

You may bring tape recorders to record the lectures. You may also bring laptops to be used for purposes consistent with engaging yourself with the lecture. However, if it is ever determined that you are using your laptop to do other things such as instant messaging, internet chatting, ect., the class will lose this privilege.

Lecture Exam Procedure

All students are to wait outside on exam days. The teaching staff needs to come in and set up for the exam. When you are invited into the hall, you will leave your personal items either at the back of the lecture hall, or on the floor in front of the lecture hall. You may only sit in seats that contain an exam. The only items you can take to your seat are the materials needed and allowed to take the exam such as pencils, pens, erasers, scantrons, etc.

Turnitin - Turnitin software will be used in this course to determine the level of student "originality" of the required research paper. Please read the following carefully:

"Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. You may submit your papers in such a way that no identifying information about you is included. Another option is that you may request, in writing, that your papers not be submitted to Turnitin.com. However, if you choose this option you will be required to provide documentation to substantiate that the papers are your original work and do not include any plagiarized material."

If you decide that you do not want to turn in your paper through Turnitin, you ARE REQUIRED to submit COMPLETE copies of all of the sources you used to write the paper so that plagiarism can be determined by the grader. If you decide to turn your paper in through Turnitin, the same rules from last term will apply for the deduction of points based on the "originality report" in the Turnitin software.

Lecture Schedule

Date	Торіс	Reading
Sep 25	Course Introduction	
Sep 28	The Human Body: An Orientation	Chapter 1
Sep 30	Cells: The Living Units	Chapter 3
Oct 02	Tissue: The Living Fabric	Chapter 4
Oct 05	Tissue: The Living Fabric Cont.	Chapter 4
Oct 07	Water and Solutions	28-30; 35-41
Oct 09	Permeability and Transport	68-81
Oct 12	Chemical Building Blocks	42-56
Oct 14	Integument	Chapter 5
Oct 16	STATE BUDGET CLOSURE DAY	ONLINE ASSIGNMENT
Oct 19	MIDTERM EXAM I: 100 pts	Covers Sep 25 – Oct 16
Oct 21	Skeletal System	Chapter 7; 172-179
Oct 23	Skeletal System Cont.	Chapter 7; 172-179
Oct 26	Bone Histology and Growth; Calcium Balance	179-191
Oct 28	Articulations and Movement	Chapter 8
Oct 30	Gross Anatomy of Skeletal Muscle	Chapter 10
Nov 02	Fine Structure of Skeletal Muscle	276-284
Nov 04	Muscle Physiology I	284-305
Nov 06	Muscle Physiology II	305-316
Nov 09	MIDTERM EXAM II: 100 pts	Covers Oct 21 – Nov 06
Nov 11	Digestive System II	Chapter 23
Nov 13	Digestive System III	Chapter 23
Nov 16	Digestive System IV	Chapter 23
Nov 18	Digestive System I	Chapter 23
Nov 20	STATE BUDGET CLOSURE DAY	ONLINE ASSIGNMENT
Nov 23	Metabolism, Metabolic States and Rate	100-105; 918-954
Nov 25	Urinary System I	Chapter 23
Nov 27	THANKSGIVING HOLIDAY	
Nov 30	Urinary System II	Chapter 23
Dec 02	Urinary System III	Chapter 23
Dec 04	Water, Electrolytes and Acid/Base Balance	Chapter 26
Dec 07	FINAL EXAM: 150 pts; 8:00am - 10:30am	120 points cover Nov 11 – Dec 04

Laboratory Schedule

Date	Торіс	Exercises & Homework
Sep 23, 24	No Lab	
Sep 28, 29	Anatomical Terms & Organ Systems	1,2,&8
9/30, 10/01	The Microscope & The Cell	3 & 4
Oct 05, 06	Tissues	6A; 6B (Physioex)
Oct 07, 08	Tissues Cont.	6A
Oct 12, 13	Cell Transport and Permeability & The	5A; 5B (Physioex) & 7
	Integument	
Oct 14, 15	<i>MP</i> # 1 (<i>Sep 28 – Oct 08</i>); Skeletal	9
	Overview	
Oct 19, 20	The Axial Skeleton	10
Oct 21, 22	The Axial Skeleton & The Appendicular	10 & 11
	Skeleton	
Oct 26, 27	The Appendicular Skeleton & The Fetal	11 & 12
	Skeleton	
Oct 28, 29	<i>MP #2 (Oct 12- Oct 27);</i> The Muscular	14
	System	
Nov 02, 03	Midterm Lab Practical (Sep28 –Oct 27)	
Nov 04, 05	The Muscular System	14 & 15
Nov 09, 10	The Muscular System	15
Nov 11, 12	Muscle Physiology	16A; 16B (Physioex)
Nov 16, 17	MP #3 (Oct 28 – Nov 12) ; Digestive	38
	System Anatomy and Histology	
Nov 18, 19	Chemical & Mechanical Digestion	39A; 39B (Physioex)
Nov 23,24	Urinary System Anatomy	40
Nov 25, 26	Thanksgiving Holiday	No Lab
11/30, 12/01	MP #4 (Nov 16 – Nov 24) ; Review for	41B (Physioex)
	Final	
Dec 02, 03	Final Lab Practical (Oct 28 – Dec 01)	

Laboratory Homework – Lab homework assignments are to be completed prior to coming to lab. You will turn in the "original" from your lab manual. You may make copies for yourself, so that you may continue studying and make any adjustments to your answers while actually completing the lab. You will turn in the exercises for every lab chapter in the syllabus, including the physioex chapters (and any assignment your lab instructor passes out). It is suggested that you spend quality time with the homework assignments. This will insure that you are prepared to work hard in lab, and give you an opportunity to "study". It does not help you in the long run to copy answers from a colleague just before the laboratory session. Take responsibility for you own progress in this course. Half of your points will be given for an online timed laboratory quiz to be taken through Blackboard/WebCT. The other half of the homework points will be given for successful "completion" of the laboratory homework. If you are caught writing in any random answer for the homework that you turn in, you will not receive points for that portion of the homework. The online lab quizzes will be graded and are based on the laboratory review exercises/homework.

Open Lab - We will open the lab across the hall as much as we can to allow students to **study**. Open lab is for you to increase your chances of getting the grade you want out of this course. There will be no extra credit given for your taking advantage of open lab opportunities. Remember, the teaching staff is opening the lab voluntarily (**no extra pay**). Furthermore, open lab is not merely another taught lab that you can attend in lieu of

your assigned lab. The teaching staff is there to supervise, not to teach. Please use "office hours" or your assigned lab period to discuss anything you are not understanding with your own lab instructor.

Things to know for the Organ Systems (Rat Dissection)

Rat Dissection: Be able to identify the following structures (organs) and know which organ systems the structures belong to.

Cardiovascular System

Heart Spleen (also lymphatic) Artery & Vein **Respiratory System** Lungs Trachea

Digestive System

Esophagus Stomach Small Intestine Large Intestine Liver Pancreas Gall Bladder **Urinary System** Kidneys Urinary Bladder Ureters

Cross-Sectional Torso

O21 Trachea O22 Esophagus O24 Lungs O28 Left Atrium O29 Right Atrium O30 Liver O31 Stomach O32 Diaphragm O33 Spleen O34 Pancreas O35 Kidney O37 Duodenum O38 Jejunum O39 Ileum O40 Colon

Endocrine System Adrenal Glands

Pancreas Testes Ovaries

Reproductive System

Testes Penis Scrotum Ovaries Uterus (uterine horns) Seminal Vesicles Vagina

Muscular System/Respiratory System Diaphragm

Laboratory Safety and Rules

- Evacuation Procedures (Follow directions of your instructor)
- Hazardous Materials be careful when handling glass and sharp objects such as microscope slides, test tubes, and dissecting tools. Report any injury, spill or broken equipment to your instructor.
- No eating or drinking in the lab. Do not even bring food into the lab unless it is secure within your backpack or other closed carrying apparatus. Bottled water is acceptable.
- Be careful with all lab equipment. Follow any instructions on how to operate any equipment in the lab. Be careful not to write on any charts, models, lab benches, ect. Make sure to handle models, bones, skeletons, ect with extreme care as they are very expensive.
- Make sure to leave the lab as you found it when you arrived. Clean up after yourselves, put all models and keys back where you found them; reassembled and in order. Push your lab stools under the lab bench before you leave.
- Lab coats are not required, but may be useful on days when performing dissections or other "wet lab" procedures. Lab coats will protect your clothing.
- **NO PHOTOGRAPHY** will be allowed in the laboratory. Your textbooks have excellent and adequate online resources for you in the form of pictures, models, histology slides, etc. It has not been seen in this course that taking pictures helps anyone's grades. We are convinced of that.
- **CELL PHONES (and other electronic devices)** are not allowed to sit on the lab benches, are not allowed to be used in the laboratory, are not allowed to ring or make any other noise during the lab period. The penalty for cell phone (or other electronic device) disruption is a deduction of 5 points every time it happens. You may not plug your cell phones or other electronic devices into the laboratory electrical outlets (Laptops excepted when being used as a laboratory learning tool).
- You may bring a laptop in order to be used for educational purposes only. If you are caught using the laptop for anything not relevant to this course, you will lose your privilege to use it during your laboratory period.
- You must take your laboratory time seriously, therefore, no horseplay or unnecessarily loud conversations during lab. You may be affecting the concentration of your colleagues around you. However, collaboration, discussion and polite debate are encouraged within groups (or even between groups).
- You will be given a copy of this contract to sign which says that you understand the laboratory rules for this course. You must sign this agreement in order to begin subjective evaluation.

Please sign below.

I understand and agree to follow all laboratory safety procedures and rules.

 Name:

 Lab Instructor's Name:

 Date:

CSU Employee Furloughs – Impact on Classes

This year across this campus and around the CSU system some class days will be cancelled because of furloughs. A furlough is mandatory un-paid time off; faculty and staff on each CSU campus are being "furloughed" two days per month.

These cancelled class days are marked on the syllabus above as **STATE BUDGET CLOSURE DAYS**. It is important to recognize that these days off are **not** holidays. Instead, they are concrete examples of how massive state budget cuts have consequences for you as students and for me as a faculty member.

The CSU has suffered chronic under funding for at least 10 years. This year the budget cuts are the worst in the history of our university system — \$584 million or 20% of our budget.

The CSU administration is attempting to deal with these cuts with huge increases in student fees (32%), course reductions, and lay-offs of faculty and other university employees.

In addition to paying higher fees, students will likely be affected by reduced services and classes. The library will have shorter hours. Many campus support services may be decreased or eliminated. There may be challenges in getting needed signature on forms. Many courses will be cut from the class schedule or will be full.

If you would like to take action, or simply learn more, I strongly recommend you contact the California Faculty Association on campus to get connected with other CSULA students who are working on these issues.

For more information, please contact CFA by email: <u>cfa@cslanet.calstatela.edu</u> or by phone: 323 343 – 5310.