

Zoology 2235: Human Physiology

Fall 2014; sections 001-003

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Office Hours: MW 2-3 or by apt.

Office: N270

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Lecture: MWF 100-150; C210

Lab: T or R 200-450; N229

Prerequisites: BIOL 1010/1020 or BIOL 1050 and 1150

Required Materials:

1. Fundamentals of Anatomy & Physiology by Martini, et al. 9TH edition. Pearson (ISBN: 9780321719799).

2. Mastering A&P access (bundled with text at bookstore...otherwise purchase access online)

Course Description: Zoology 2235 will be an in depth study into the functions of the human body. We will cover all the physiological systems, with extended detail on metabolism, nerves, muscles and cardiovascular functions. Physiology is a demanding discipline; Students should be prepared to spend a great deal of outside time on this course. Reading alone can be substantial, but reviewing notes, doing problem sets, laboratory data analysis, and laboratory write-ups will require a great deal of time.

- ZOOL 2235 is a course intended primarily for Kinesiology students; it will not fulfill requirements for a nursing major.

Attendance: Students are expected to attend lectures and are required to attend all lab sessions. Please arrive in a timely manner. Any missed labs not arranged in advance will result in a 5% decrease in your entire grade and a zero for lab work that week, other than for a documented medical emergency.

Exams: There will be four exams, with a cumulative section on exam number four. Exams will reflect the topics covered in lecture and lab sessions. Exams can only be missed with a documented physician's note or other family emergency. Spelling and grammar always count!

Pre-Lab Quizzes: Short quizzes will be given at the start of each lab (beginning with second lab), these should take no more than ten minutes and are intended to test your knowledge of the upcoming lab. In order to succeed on these quizzes, you will be required to have reviewed and understood the lab exercise for the week prior to lab.

Lab Assignments: Your group will be required to turn in the completed lab assignment at the start of the following week's lab. Late assignments will be accepted for only half credit after this time. Lab reports/exercises will be graded on their content as well as their presentation and correct use of spelling/grammar.

Mastering A & P: The course can be found at Masteringaandp.com, Course ID is: Zoology 2235 Human Physiology (MAPSARDELLA44444). Mastering assignments will be due *the first day of the week prior to starting a new topic*. This is in order to expose students to the material in some depth prior to lecture. Student participation during lecture is much appreciated!

Blackboard: Course materials will be available using blackboard (2014-FL-ZOOL2235-001) and all lab materials will be available a week prior at minimum for those labs having quizzes. The lab sections on Bb will not be used!! All materials will be posted under lecture section (001).

Evaluation:

Four exams worth 100 points each	400
Sixteen Homework assignments worth 20 points each	320
Pre-Lab Quizzes worth 5 points each	60
Lab assignments worth 10 points each	130
<u>Lab Participation</u>	<u>40</u>
Total Cumulative Points:	950

Grading Scale: A percentage of total points will be calculated, and the following scale used

A: 100-93; **A-:** 92-89; **B+:** 88-86; **B:** 85-83; **B-:** 82-79; **C+:** 78-76;

C: 75-73; **C-:** 72-69; **D+:** 68-66; **D:** 65-60; **F:** 59-0

Extra Credit Opportunities WILL come up...

Academic Dishonesty: There will be a zero tolerance policy for academic dishonesty, this includes, but is not limited to, cheating, plagiarism, and use of course materials in an inappropriate manner such as posting online. Violating this policy will result in a failing grade for the course and referral to the Student Judicial Affairs Office. See University code of conduct for more info:

<http://www.csustan.edu/judicial-affairs/student-responsibilities>

Tentative Lecture Schedule

Week	Date	Lecture Topic	Martini <i>et al.</i>
1	8/22	Course Intro	
2	8/25	Biochemistry	Ch 2
		Cell Biology	
3	9/1	<i>Labor Day Mon. 9/1</i>	Ch 3
		Cell Physiology	
4	9/8	Metabolism Pt 1	Ch 25; 1-4
		Nervous System	
5	9/15	Neural Function	Ch 12
		EXAM I Friday 9/26	
6	9/22	Muscle Physiology	Ch 10
		The Heart	
7	9/29	Heart Physiology	Ch 20
8	10/6	Cardiovascular	Ch 21
		Blood Vessels	
9	10/13	Respiratory Physiology	Ch 23
		EXAM II Friday 10/17	
10	10/20	Blood	Ch 19
11	10/27	Immune System	
		Renal Physiology	Ch 26
12	11/3	Renal Physiology	
		Fluid Balance	Ch 27
13	11/10	Fluid Balance	
		EXAM III Wednesday 11/12	
14	11/17	Endocrine Physiology	Ch 18
15	11/24	Digestion	Ch 24
		<i>Thanksgiving (no Fri. class 11/28)</i>	
16	12/1	Metabolism Pt. 2	Ch 25
17	12/8	Course Review	

EXAM IV during Finals 12/11-17

Tentative Lab Schedule

Week Of	Topic	Handout	Biopac	PhysioEx 9.0
8/22	NO LAB			
8/25	Scientific Method*	Homeostasis		
	Homeostasis			
9/1	Membrane Transport	Diffusion/Osmosis		
9/8	Metabolism	Glucose Lab		
9/15	Autonomic Nerves	Nerve Lab	9, 11	
	GSR, Reaction Time			
9/22	Muscle Physiology		1, 2	
9/29	Cardiac Physiology		5,7	6(1)
10/6	Cardiovascular Physiology		16,17	6(2-5)
10/13	Pulmonary Physiology		12, 13	
10/20	Exercise Physiology		15	
10/27	Renal Physiology	Urine Lab		
11/3	Acid/Base Regulation	Acid/Base		10(3,4)
11/10	NO LABS-Veterans Day 11/11			
11/17	Endocrinology			4(1,2)
11/24	NO LABS- Thanksgiving 11/27			
12/1	Digestion	Enzyme Lab		

* No Pre-Lab Quiz

ASK FOR HELP!! If you feel that you are falling behind, or having difficulty understanding certain concepts, please do not hesitate to ask for help; I am available at my office more often than not and students are always welcome