

Zoology 4280: Physiology of Human Systems

Fall 2015; section 001-003

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Office Hours: MW 10-11:00

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Lecture: MWF 9:00-9:50, C204

Lab: Lab Sec 002: M 2:00-4:50, N229

Lab Sec 003: W 2:00-4:50, N229

Prerequisites: BIOL 3310 and CHEM 3010, CHEM 3012, or equivalents.

Required Materials:

Vander's Human Physiology, McGraw-Hill, 13e. ISBN 9780077510213 with [McGraw-Hill Connect Access](#). Course webpage: <http://connect.mheducation.com/class/b-sardella-zool-4280-fall15>

Attendance: Students are expected to attend all lectures and lab sessions. Please arrive in a timely manner. You will not be awarded any points that your lab group earns in your absence. Poor attendance is highly correlated with a less than optimal final grade!

**Missing class during week one will result in your being dropped from the course to make room for anyone on the waiting list that is present.

Blackboard: We will use Blackboard heavily in this course, if you are not experienced with this site, please take some time to familiarize yourself with how it functions.

- 1) Lab Safety Course: You will be assigned the BioLab safety course on Blackboard (2015-2016-BioLabSafety: BioLabSafety). **If this is on your course list, it must be completed with a 100% score by September 2nd or you will be dropped from the course!**
- 2) All lab assignments will be facilitated by BlackBoard. Lab exercises and reports can be downloaded and turned in under 'assignments' on the course page.
- 3) Lecture slides will be posted as a pdf file FOLLOWING each lecture session.

Exams: There will be 500 points available via exams and quizzes:

- 1) Online quizzes: An online quiz will be administered on the course connect webpage for each chapter during the course (review chapters will be combined). The exams are 20 point, multiple choice quizzes. Open notes/book are allowed on these exams, but they are timed at 30 minutes and students should take care not to spend too much time looking for answers in the book or notes. These quizzes consist of 20 randomly-assigned questions, and no two students will have the same quiz. Working together is not recommended. Quizzes will be available following the last lecture covering their material, and due by 11:59pm that day. You will be awarded points as a percentage of total quiz points, with a max of 100 points.

- 2) Written Exams: Four 100 point in-class exams will be given that will attempt to tie multiple concepts together. These exams will focus on problem solving and short descriptive essay questions. These are intended to show your ability to integrate the various physiological concepts.

*****NO MAKEUP EXAMS WILL BE GIVEN*****

You must have a serious and compelling reason that can be documented in order to miss an exam, should this occur, the student and professor will develop a plan of action that best suits the circumstances of the absence.

Homework: There will be weekly reading assignments for this course. They are due by 8:00 am of the first scheduled lecture in which they are covered. No points will be given for late assignments. Points are awarded for demonstrating your understanding of core physiological concepts. You will learn more about how this works during an orientation session on the first day. You should allow 90-120 minutes for each assignment. Point values vary from assignment to assignment, and your total homework grade will be calculated as a percentage of total points earned (ie; Max of 100 points).

Lab: Lab meets once per week and attendance is mandatory. Missing lab will result in a zero for that week. You will be associated with one group for the entire lab, and all assignments will be turned in as a group. Lab exercises are available on BlackBoard for download and must be turned in electronically; no paper lab reports will be accepted. The pre-lab exercises are due prior to each lab and are worth five points. Final Lab reports are due posted on Bb prior to the start of the next week's lab. The lab report logistics will be covered during an orientation on the first day. Each lab report is worth 10 points, for a total of 15 points per week. The final score for lab will be based on a percentage of total points, with a maximum of 100 points possible.

Research Project: There will be a 100 point group lab research project due at the end of the term. This project will give students an opportunity to use the tools available within the physiology lab to design, set up and conduct their own research. Our final day of lab will be a poster session, where peer review will be given and each group will briefly discuss their work. More information will be given in lab.

Open Labs: There will be opportunity through the semester to participate in extracurricular labs on Friday mornings. These will be used to evaluate the usefulness and logistics of labs that will be attempted for the first time during the fall '15 semester. Students will be required to sign up for these in advance on blackboard. These will not be rewarded with any extra credit points, but will be valuable experience and a good opportunity for greater understanding of physiology.

Assessment: There will be a subjective grade worth 50 points based on your lab participation. 25 points will be peer-evaluated, and 25 points will be instructor evaluated. Not participating, being late, or unexcused absences will dramatically lower this grade, as will leaving a mess for the instructor ☹.

Evaluation:

Online quizzes (% of total)	100
Four In-Class Written Exams (100 each)	400
Group Lab Reports (% of total)	100
Homework/Reading (% of total)	100
Research Project	100
<u>Assessment (peer and Instructor)</u>	<u>20</u>
Total Cumulative Points:	820

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

A: 100-90; **B:** 89-80; **C:** 79-70; **D:** 69-60 **F:** 59-0

+/- will be assigned by instructors discretion.

- The CR/NC grading option is not approved for this course; only letter grades can be earned.

Course Drop and Withdrawal Policy

The policies for add/drop or withdrawal during the summer session will be those of the University Extended Education program. Please familiarize yourself with this policy, as due to our abnormal start time, there may be discrepancies. The Program can be found on the web here:

<https://www.csustan.edu/uee/summer-session-2015>

A grade of “incomplete” will only be considered when a serious and compelling reason is given. An Incomplete signifies (1) that a portion of required coursework has not been completed and evaluated in the prescribed time period due to unforeseen but fully justified reasons beyond the student’s control, and (2) that there is still a possibility of earning credit. It is the responsibility of the student to bring pertinent information to the attention of the instructor and to determine from the instructor the remaining course requirements which must be satisfied to remove the Incomplete.

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 Schedule

Week	Day	Date	System/Topic	Connect	Lab
1	M	24-Aug	Course Intro		Orientation/Tutorial/Experimental Design Homeostasis: Blood Pressure and HR
	W	26-Aug	Review: Homeostasis	(1)	
	F	28-Aug	Review: Cell Biology	(2,3)	
2	M	31-Aug	Review: Transport	(4)	Bioassays: Spectrophotometry and Glucose measurement
	W	2-Sep	Review: Signal Transduction	(5)* Q1	
	F	4-Sep	Nervous System	6	
3	M	7-Sep	Labor Day		No Labs due to Labor Day
	W	9-Sep	Nervous System		
	F	11-Sep	Nervous System	Q2	
4	M	14-Jun	Senses	7	Nerves: Polygraph and Reaction Time
	W	16-Sep	Senses	Q3	
	F	18-Sep	Exam I		
5	M	21-Sep	Muscle	9	Muscles: Electromyogram and Contraction Force
	W	23-Sep	Muscle	Q4	
	F	25-Sep	Movement	10	
6	M	28-Sep	Endocrine System	11	Research Project: Development Assignment and Proposal
	W	30-Sep	Endocrine System	Q5	
	F	2-Oct	Cardiovascular	12	
7	M	5-Oct	Cardiovascular		Cardiovascular: Electrocardiogram and Pulse
	W	7-Oct	Cardiovascular		
	F	9-Oct	Cardiovascular	Q6	
8	M	12-Oct	Pulmonary	13	Cardiovascular II: Blood Pressure and Auscultation
	W	14-Oct	Pulmonary	Q7	
	F	16-Oct	EXAM II		
9	M	19-Oct	Kidney	14	Respiratory: Spirometry, and Acid/Base Regulation
	W	21-Oct	Kidney		
	F	23-Oct	Kidney		
10	M	26-Oct	Kidney	Q8	Renal: Urinalysis and Electrolyte Balance Proposals Due
	W	28-Oct	Digestion	15	
	F	30-Oct	Digestion		
11	M	2-Nov	Digestion	Q9	Digestive: Enzymatic Digestion Rates
	W	4-Nov	Metabolism	16	
	F	6-Nov	Metabolism		
12	M	9-Nov	Metabolism		No Labs due to Veteran's Day
	W	11-Nov	Veterans Day		
	F	13-Nov	Metabolism	Q10	
13	M	16-Nov	EXAM III		Research Project
	W	18-Nov	Reproduction	17	
	F	20-Nov	Reproduction		

14	M	23-Nov	Reproduction	Q11	Research Project Open Lab, M 10:00-3:00 No formal lab sessions	
	W	25-Nov	<i>Open Day</i>			
	F	27-Nov	<i>Thanksgiving</i>			
15	M	30-Nov	Immunity/Disease	18	Research Project	
	W	2-Dec	Immunity/Disease			Q12
	F	4-Dec	Medical			
16	M	7-Dec	Medical		Poster Presentations	
	W	9-Dec	Medical			

#Exam IV (non-cumulative) will be during finals week

***All reading assignments from Ch. 1-5 will be due Wednesday September 2nd. These are very important for those in need of review, as subsequent chapters will ASSUME you understand this material. All other chapter assignments will be longer, more in-depth, and due individually on the day the chapter material is covered in Lecture**

Don't Fall Behind! This is a difficult course due to the material, and it builds one day after the next. Skipping lectures, or putting off studying will result in you getting lost very quickly. If you keep up with the material, you will do much better and enjoy the course much more!!

YOU are responsible for YOUR education, but do not hesitate to get help when needed... Good Luck!