PHYSIOLOGY LABORATORY (ZOOL 2232) SYLLABUS M 2:00 – 4:50 pm; Room N229

Instructor: Dr. Katherine M. Schroeder

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Office hours: TR: 2:00-3:00 or by appointment, room N252

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Prerequisite: Zool 2230 or concurrent enrollment

Objectives

To illustrate, with laboratory experiments, exercises and demonstrations, the principles of physiology with special reference to human physiology.

Required text and other materials

• PhysioEx 9.1 Laboratory simulations in Physiology by Zao et al.

Grading

	Points	~% of final grade	
Exam 1	20	20.0	
Exam 2	20	20.0	
Exam 3	20	20.0	
Lab assignments	30	30.0	
Group project	10	10.0	
Total 100		100	

Exams

• Short answer, multiple choice, matching, fill-in-blank

Lab assignments

- Due at beginning of following lab session unless otherwise specified
- 17 assignments, equally weighted
- No lab makeups

Group project

• Each group of three will be responsible for discussing answers to a given assignment

Final grade

$$93-100\% = A87-89\% = B+$$
 $77-79\% = C+$ $67-69\% = D+$ $90-92\% = A-83-86\% = B$ $73-76\% = C$ $60-66\% = D$ $80-82\% = B 70-72\% = C 0-59\% = F$

Tentative Lab Outline							
Week	Date	Topic	Handout	Biopac	PhysioEx		
1	2/2	Homeostasis	Homeostasis; metrics				
2	2/9	Tissues and Organs	Tissues				
3	2/16	Enzymes and Digestion	Digestion		8: 4		
4	2/23	Measurement of Plasma Glucose	Glucose determination		4: 2		
5	3/2	Diffusion, Osmosis, and Tonicity	Transport				
6	3/9	Exam 1; Endocrine system			4: 1		
7	3/16	Nervous System	Sensory		3: 1,2		
8	3/23	The Muscular System		1,2	2: 1, 2, 3		
9	3/30	The Cardiovascular System		5,7	6: 1, 2, 4		
10	4/6	Spring Break!					
11	4/13	Exam 2; Immune System	Immunity; video				
12	4/20	Measurements of Pulmonary Function		12,13			
13	4/27	Renal Regulation	Renal lab				
14	5/4	Acid-base Balance	Acid-base Balance		10: 1,2		
15	5/11	Exam 3		-			