

Syllabus

Instructor: Mark A. Grobner, Ph.D.
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Office Location: N259
Office hours: TR 10:00-11:00 am
W 2:00-3:00 pm
Other times by appointment
Course Link: <http://biology.csustan.edu/~grobner/mark-moodle/>
Personal Link: <http://biology.csustan.edu/~grobner>
Biology Dept.: <http://biology.csustan.edu/>

Laboratories: Sec 002 W 9:00-11:50 am in N229
Sec 003 R 2:00-4:50 pm in N229

Prerequisite: Biol. 1010, or Zool. 1050, or Zool. 2250

Required Text: PhysioEX 8.0 Laboratory Simulations in Physiology by P. Zao, T. Stabler, G. Peterson

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

Grading: Grading is based on prelab worksheets, three exams and laboratory writeups. The prelabs are worth 5 points each, tests 50 points and the laboratory write-ups are worth a total of 100 points. Grading will be based on 300 total points as follows:

Assessment	Points Possible
Prelabs	50
Tests	150
Lab Write-ups	100
Total	300

Prelab worksheets: For 10 of the laboratory exercises there are prelab worksheets available on the course web page. These completed sheets are due at the start of the particular laboratory they are associated with. For instance, the tissue prelab worksheet is due the day we will be doing the tissue and organ exercises. This sheets will not be accepted late.

Laboratory Write-ups: Laboratory write-ups will be collected on five occasions at the beginning of randomly chosen labs. These worksheets consist of materials that are downloadable from the course web site. This includes questions listed in the exercises as well as data sheets for the BioPac and PhysioEx exercises. These will be asked for at the beginning of the lab the week after the exercise has been completed. Write-ups must be turned in at the beginning of the period when asked for, labs will not be accepted after the first 5 minutes of lab. They are worth 20 points each for a total of 100 points. Two points will be subtracted from your laboratory write-up grade for each wrong answer, each unanswered question or incomplete data table. **Please do not use the lab printer to print your lab exercises and worksheets.**

Attendance: It is required that you attend and remain in the laboratory until the entire exercise is completed, including cleaning up your area. Individuals leaving their lab partners to collect data will be marked absent. Persons missing two or more labs will also lose 5% of their total lab points for **each lab missed**. There are no make-up labs available.

General: Please read the Laboratory Safety Guidelines and Laboratory Policies posted on the web site and handed out in class. Read your lab assignment before coming to lab. At the beginning of each lab, organize your lab space and get all necessary glassware, instruments and reagents. Be aware of what you and your lab partners are doing. At the end of each lab, you are responsible for cleaning all glassware and returning all supplies to their proper locations. **Missing and broken labware will be charged to the group responsible.** You will be in assigned groups (especially important when we use the BioPac and PhysioEx software) and your group is responsible for its supplies. I will deduct 5% of your total lab points for unclean or misplaced equipment from each member of the offending group. At the end of class, all lab benches will be cleaned with a disinfectant soap. There is **NO FOOD OR DRINK** allowed in the lab.

Tentative Laboratory Schedule

Date	Lab.	Topic	Corresponding Pages in Fox	Prelab Handouts	Biopac	PhysioEx
8/25 & 26	1	Getting Started - What to Expect	1-10			
9/1 & 2	2	Tissues and Organs	11-21	Tissues		
9/8 & 9	3	Diffusion, Osmosis and Tonicity	134-140	Transport		1
9/15 & 16	4	Measurement of Plasma Glucose	334, 651-659	Glucose		
9/22 & 23	5	The Digestive System Exam #1	596-631	Digest		8
9/29 & 30	6	Measurements of Pulmonary Function	510-536	Pulmonary	12 & 13	
10/6 & 7	7	The Cardiovascular System	377, 402-413, 456-462	Cardio	7	6
10/13 & 14		No Laboratories Acid-Base Balance				10
10/20 & 21	8	The Immune System Exam #2	474-496	Immunity		
10/27 & 28	9	The Muscular System	348-363	Muscle	1 & 2	2
11/3 & 4	10	Renal Regulation of Fluid and Electrolyte Balance	560-586	Renal		
11/10 & 11	11	Acid-Base Balance		Acid-Base		10
11/17 & 18	12	The Nervous System	260-296	Sensory		
11/24 & 25		No Laboratories				
12/1 & 2	12	The Endocrine System	306-338			4
12/8 & 9		Final				

This schedule is subject to change.