

Laboratory for Physiology Biology
4241.01, 4241.02, and 4241.03
Spring 2017
Course Information

Class meets once a week:

Section1 (01): Monday 6:00 PM – 9:50 PM
Section2 (02): Thursday 6:00 PM – 9:50 PM
Section3 (03): Thursdays 1:00 PM—4:50 PM

Mr. Steve Gruber
Mr. Steve Gruber
Mr. Steve Gruber

Room: 3209 Bayou Bldg.

Instructors:

Mr. Steve Gruber
Office Hours: Monday-Thursday from 2-4
Office: Suite 3237, Room 18
Office Phone: 281-283-3779
Email: gruber@uhcl.edu

If you need to contact your instructor between classes, please **send an email**.

Course Learning Objectives:

- To develop hands-on skills in carrying out physiology experiments.
- To develop skill in data collection and analysis using knowledge of basic physiologic principles.
- To gain appreciation of the application of physiologic principles in a laboratory setting.
- To learn the use of digital data collection and analysis software.
- To develop skill at presenting and illustrating the data collected in the lab, and using these skills in answering questions.
- To develop interpersonal skills by working cooperatively in small groups to achieve a common purpose: learning and applying physiology principles.

Methodology: The material covered will be presented in laboratory exercises that the student will perform. Class participation is required.

Required Text: There is no required text for the course. Laboratory exercises will be available on Black Board the week before the lab. Reference books may be provided on reserve in the Neumann Library.

Exams: There will be **three exams**. Each exam will be worth 50 points and will be based on material covered in the previous labs. With respect to material covered, the exams will not be cumulative. If you miss an exam contact the instructor immediately to schedule a make-up exam. **Total exam points possible: 150.**

Lab Reports: Each student will produce a typewritten report for each lab. These reports will be handed in (or emailed no later than) at the beginning of the subsequent week's lab. Unless you make prior arrangements with the instructor, **NO LATE LAB REPORTS WILL BE ACCEPTED.** Each report will be worth 10 points. **Total points possible from reports: 100.**

Weekly Prelab Quiz: Starting with the second week of class, a weekly quiz worth 5 points will be given at the beginning of each lab. The questions on the quiz will be based on the lab protocol for that week's lab. There will be 9 quizzes for a total of **45 points**. **NO MAKE-UPS** will be given for weekly quizzes **REGARDLESS OF THE REASON FOR MISSING THE QUIZ.** If you come to lab late (after everyone had completed the quiz), or miss a lab, you lose all 5 quiz points for that week.

Class Participation: Participation during the lab is expected. Everyone should expect to serve as a subject for the lab exercises. Class participation will be worth a total of **50 points**. Missing a lab hurts your team! **REGARDLESS OF THE REASON, YOU WILL LOSE 5 PARTICIPATION POINTS FOR EVERY MISSED LAB.**

Grades: Final grades will be based on the total points accumulated. The total possible points for the course is **345**. Your final course letter grade will be determined as a percentage of this total (for example $300/345 = 87\%$). Letter grades will be assigned according to the scale, 90-100=A, 80-89.9=B, 70-79.9=C, 60-69.9=D, and less than 60 =F. If you feel that you are having trouble with the material, please contact the instructor immediately, so that help can be provided. Please, don't wait until the last week of the course to seek help!

Honor Code: Students will be expected to adhere to the UHCL Academic Honesty Policy. This code is detailed in the 2015-2016 UHCL catalog and online at http://prtl.uhcl.edu/portal/page/portal/PRV/FORMS_POLICY_PROCEDURES/STUDENT_POLICIES/Academic_Honesty_Policy. A student found in violation of this code will be held accountable for their behavior.

Students with Disabilities: If you are certified as disabled and entitled to accommodation under the ADA Act, Section 503, please tell me immediately so that arrangements can be made. If you are not currently certified and think you may qualify, please contact the Health and Disability Services Office.

Drop Deadlines: If you drop the course between the first day of class and **Feb. 1st** your name will be removed from the roster and you will not receive a grade. The last day to drop the course and receive a **WX** on your transcript is **April 11th**. **It is your responsibility to initiate the drop proceedings. If you simply stop attending the course I will be required to assign you a grade of 'F'.**

Request for an Incomplete (grade of I): If you are unable to complete the course due to illness, injury, or some other emergency situation that prevents you from attending class you may request an incomplete (grade of I). The UHCL policy regarding incompletes states that a student must be making “satisfactory progress” in order to receive an incomplete. **I interpret this to mean that you must be earning a grade of at least a ‘C’ to receive an incomplete (‘I’) for the course.** If you are earning less than a grade of ‘C’ you cannot receive an incomplete.

6 Drop Rule Limitation: Students who entered college for the first time in Fall 2007 or later should be aware of the course drop limitation imposed by the Texas Legislature. Dropping this or any other course between the first day of class and the census date for the semester/session (September 7th) does not affect your 6 drop rule count. However, dropping a course between the census date and the last day to drop a class (November 7th) for the semester/session will count as one of your 6 permitted drops. You should take this into consideration before dropping this or any other course. Visit www.uhcl.edu/records for more information on the 6 drop rule and the census date information for the semester/session.

Tentative Schedule for Physiology Lab Spring 2017*

DATE (Week of)	TOPIC
Jan 17-23	Introduction to Course: Homeostasis: The Unifying Concept of Physiology And Biopac Demonstration exercise.
	MUSCLES
Jan 24-30	The EMG and Muscles (students as models, using Biopac)
	NERVOUS SYSTEM
Jan 31-Feb 6	Modalities of Somatic Sensation (students as models)
Feb 7-13	Eye movements and vestibulo-ocular reflexes (students as models, using Biopac)
Feb 14-20	EXAM 1 (covering Homeostasis, Biopac, EMG, and Nervous System Labs)
	CARDIOVASCULAR SYSTEM
Feb 21-27	Introduction to Electrocardiography (students as models, using Biopac)
Feb 28-Mar 6	Mechanical Events of the Cardiac Cycle (students as models, using Biopac)
March 7-20	The Cardiovascular Response to Exercise (students as models, using Biopac)
March 13-17	No Labs This Week-Spring Break
	RESPIRATORY SYSTEM
March 21-27	Pulmonary Function Tests (students as models, using Biopac)
March 28-April 3	EXAM 2 (covering Cardiovascular System and Pulmonary Function Labs)
	RENAL SYSTEM
April 4-10	Osmotic Effects of Dissolved Solutes (students as models)
April 11-17	Kidney Regulation of Osmolarity (students as models)
	DIGESTIVE SYSTEM AND METABOLISM
April 18-24	Metabolic Regulation of Blood Glucose (students as models)
April 25-30th	EXAM 3 (covering Renal System and Regulation of Blood Glucose Labs)

***NOTE: This lecture schedule is intended as a guide and may be altered as necessary by the instructor.**