

Biology 590- Fall 2007

Course Information:

Course Title: Physiology of Human Systems Fall 2007
Course Number: 04896
Course Credit Hours: 4 units
Prerequisites: Chem 365, Physics 180B, 182B; or for the bioengineering emphasis:
Physics 195, 196, 197
Strongly Recommended: Biology 366
Meeting Day/time: Tu/Th 2-3:40 **note** this change
Meeting Location: AL101
Final Exam: Dec 11 from 1 to 3 pm
Department: Biology
Department Location: North Life Sciences
Instructors: Chris **Glembotski**, Professor of Biology, LS 326, 594-2959 cglembotski@sciences.sdsu.edu
Kim Finley, Instructor, Biology finley@salk.edu
Greg Harris, Professor of Biology, LS 311, **594-5655** gharris@sciences.sdsu.edu
Office Hours: By appointment
e-mail:

Description: This course is designed for students who have already had previous course work in biochemistry, cell biology and molecular biology. Although a previous physiology course is not required, the pace of this course will be brisk; so if you have not had physiology previously, be sure to keep up with the assigned reading. The assigned text is required, as is the assigned reading. The lectures are based heavily upon the assigned text, but also include significant amounts of material that are described in more detail than in the text. Accordingly, you cannot rely on the text only to perform your best in this course. During the semester we will discuss most, but not all organs and systems. Since this is a human physiology course, most examples will be related to human physiology in health and disease. Moreover, since a clear understanding of human physiology involves the cellular and molecular basis of organ function, we strongly recommend that you have a firm knowledge of fundamental biochemistry, cell and molecular biology (see above).

Purpose: The purpose of this course is to provide students with an opportunity to learn about organ, systems, cellular and molecular basis of physiology.

Student Learning Objectives:

discuss and write about the anatomical features and physiological functions of the human body
discuss and write about the prevailing theories underlying the tissue, organ, cellular and molecular basis of human disease

Course Grading- Your grade in this course will be determined by your score on 5 quizzes that will be given throughout the semester. Together, the quizzes amount to a maximum of 600 points. Since we will grade on a curve, your final letter grade in the course will be assigned only after all the quizzes have been administered. Although the grading cut-offs differ from semester to semester, an example of a possible final grade break-down is as follows:

An Example Letter Grade Breakdown:

Letter Grade	%	points
A	> 80	> 480
B	70-79	420-479
C	54-69	324-419
D	35-53	210-323
F	< 35	< 210

Typical median grade = approx. 70%

Use this table as a general guide only. If, during the course of the semester, you come to one of us and ask what your letter grade is currently, we will refer to this table and say “If the final course curve follows the example on the web page, you’ll get; however, until all the quizzes have been taken, and the final grading curve established, we cannot tell you for certain what your grade will be.”

Keys to Success in this Class:

1. Attend class regularly and be on time.
2. Read the section of the text relevant to the class material IN ADVANCE of the class meeting.
3. Read the power point material relevant to the class material IN ADVANCE of the class meeting.
4. After each class session and before the next session, study/review what was covered in class AND review and correlate it with the relevant chapter(s) in the text.
5. Form or join a study group to help you prepare for the quizzes.

Class Policies:

1. Unless otherwise instructed, turn off cell phones, computers, and other devices that can access the internet while you are in class.
2. No text-messaging or other form of e-communication will be allowed during class.
3. Come to class on-time; it is very disruptive and disrespectful to the instructors and the other students when you come to class late.
4. You are expected to attend EVERY class session; we make it a point to get to know all of you early on in the semester, since we conduct a very interactive class. Accordingly, your absence will be noticed. Moreover, you will get the most out of this class if you attend every session.
5. You must notify Dr. Finley or Harris at least 1 week before an exam if you must be absent. You must have a valid excuse and written documentation for the excuse in order to qualify for a make-up exam. The nature of the make-up exam is variable, but most likely it will be an oral exam and must be completed before the next class session.
6. We have a zero-tolerance policy about cheating on exams. Cheating means getting exam answers from an external source, including people in or outside of class, including via classical cheating methods (i.e. roaming eyes), or via state-of-the-art cheating methods (e.g. e-messages). If you are caught cheating, your exam will be confiscated, you will be given a 0 on it, and you will be reported to the department and to student affairs for appropriate action.

Biology 590 Physiology of Human Systems (updated 8-27-07)

Date	Day	Week	Lec	Topic	Chapters*	Instructor(s)
8/28	Tu	1	1	Cell Signaling	6	Glembotski
8/30	Th	1	2	Cell Signaling	6	Glembotski
9/04	Tu	2	3	Introduction to the Endocrine System	7	Glembotski
9/06	Th	2	4	Introduction to the Endocrine System	7	Glembotski
9/11	Tu	3	5	Introduction to the Endocrine System	7	Glembotski
9/13	Th	3		Quiz 1 (Signaling and Endocrine) 100 pts	Review 1-5; 6-7	Finley
9/18	Tu	4	6	Nervous System- Neurons	8	Harris
9/20	Th	4	7	Nervous System- CNS	9	Harris
9/25	Tu	5	8	Nervous System- Sensory	10	Harris
9/27	Th	5	9	Nervous System- Autonomic	11	Harris
10/02	Tu	6		Quiz 2 (Nervous) 100 pts	8-11	Harris
10/04	Th	6	10	Muscles	12	Harris
10/09	Tu	7	11	Muscles	13	Harris
10/11	Th	7	12	Control of Body Movement- <i>Integrated Physiology I</i>	13	Harris
10/16	Tu	8		Quiz 3 (Muscle) 100 pts	12-13	Harris
10/18	Th	8	13	Cardiovascular Physiology	14	Finley
10/23	Tu	9	14	Cardiovascular Physiology	14	Finley
10/25	Th	9	15	Blood Flow and Control of Blood Pressure	15	Finley
10/30	Tu	10	16	Blood Flow and Control of Blood Pressure	15	Finley
11/01	Th	10		Quiz 4 (Cardiovascular) 100 pts	14-15	Finley
11/06	Tu	11	17	Mechanics of Breathing	17	Finley
11/08	Th	11	18	Gas Exchange and Transport	18	Finley
11/13	Tu	11	19	The Kidneys	19	Finley
11/15	Th	11	20	The Kidneys	19	Finley
11/20	Tu	13	21	Fluid and Electrolyte Balance- <i>Integrated Physiology II</i>	20	Finley
11/22	Th	13		Thanksgiving Break- No Class		
11/27	Tu	14	22	Fluid and Electrolyte Balance- <i>Integrated Physiology II</i>	20	Finley
11/29	Th	14	23	Metabolism and Energy Balance	22	Finley
12/04	Tu	15	24	Endocrine Control of Growth and Metabolism	23	Finley
12/06	Th	15	25	Endocrine Control of Growth and Metabolism	23	Finley
12/11	Tu 1-3			Final Quiz 5 (Renal, Respiration, Endocrine and Metabolism) 200 pts	17-20; 22-23	Finley