

ABIO 242 Human Physiology Spring 2003

This is a four hour introductory human physiology course with lecture and laboratory. The focus of this course will be to understand the underlying mechanisms by which cells, tissues, organs and organisms function.

PREREQUISITES: ABIO: A232
ACHM: A101 or A111

INSTRUCTOR: Dr. David K. Strom

TO CONTACT: Office: 101C, Science Building
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Home Page: <http://www.usca.sc.edu/biogeo/faculty/strom/strom.html>

OFFICE HOURS: Tuesday and Thursday from 3:30-4:30 PM. I will be in Rm 101C or Rm 217. If you are not able to meet at this time then contact me to arrange another time.

ATTENDANCE: Laboratories: Attendance at all the laboratories is required. Missing laboratories will not be excused without either prior notice, or appropriate documentation.

Lectures: I will not take role at lectures, attendance is up to you. However, there will be quizzes and assignments during lecture that cannot be made up if you miss, unless you have an acceptable reason for your absence (and documentation to support your excuse).

Tests: There will be no day of test excused absences without appropriate documentation. All tests are counted, if you miss a test, you receive a zero for that test. If you have an appropriate excuse to miss a test, the make-up test time and format will be at my discretion.

DISABILITY: If you have a physical, psychological, and/or learning disability which might affect your performance in this class, please contact the Office of Disability Services, 126A B&E, (803) 641-3609, as soon as possible. The Disability Services Office will determine appropriate accommodations based on medical documentation.

TEXTBOOK: *Human Physiology: An Integrated Approach*: 2nd Edition By: Dee Silverthorn

LAB MANUAL: *PhysioEx 4.0: Laboratory Simulations in Physiology*. By Peter Z. Zao NOTE: At the end of the semester this laboratory book will not be returned to the student. However, you may keep the CD-ROM that comes with it.

GRADING: Four lecture/lab exams ~65% (400pts)
Laboratory exercises and reports ~20% (100pts)
Quizzes/Homework ~15% (80pts)

Your final grade will be based on your total points divided by the total possible points in the course. The following percentages will apply.

>90% =A >80% =B >70% =C >60% =D <60% =F

EXTRA CREDIT: 15 points can be made by donating blood or platelets, and then writing a one page, description of your bodies physiological response to the loss of volume and cells.

All extra credit material is due by the last scheduled class period.

ACADEMIC HONESTY: Academic honesty will be expected from all students, any offense will be dealt with as outlined in your student handbook under Academic Code and Conduct.

OTHER SUPPLIES: Students will need to purchase one package of 4X6 inch index cards and bring them to each lecture.

Lectures

	<u>Date</u>	<u>Topic</u>	<u>Textbook</u>	<u>Pages</u>
1	Th. 1/9	Introduction to Physiology/Diffusion and Osmosis	Ch.5	
2	T 1/14	Membranes, Channels and Transport	Ch.5	109-116
3	Th. 1/16	Membranes, Channels and Transport	Ch.5	118-133
4	T 1/21	Membranes, Channels and Transport	Ch.5	133-145
5	Th. 1/23	Communication	Ch.6	153-163
6	T 1/28	Communication/Endocrine	Ch.6/7	164-168 180-195
7	Th. 2/30	Endocrine	Ch.7	195-203
8	T 2/4	TEST #1		
9	Th. 2/6	Neurons	Ch.8	215, 220-226
10	T 2/11	Neurons	Ch.8	226-234
11	Th. 2/13	Neurons	Ch.8	234-240
12	T 2/18	Muscle	Ch.12	347-360
13	Th. 2/20	Muscle	Ch.12	362-365
14	T 2/25	Muscle/Heart	Ch.12/14	
15	Th. 2/27	Heart	Ch.14	411-423
16	T 3/4	Heart	Ch.14	423-431
17	Th. 3/6	TEST #2		
	T 3/11	SPRING BREAK		
	Th. 3/13	SPRING BREAK		
18	T 3/18	Cardiac Output	Ch.15	434-435, 407-410
19	Th. 3/20	Cardiac Output	Ch.15	444-462
20	T 3/25	Blood	Ch.16	475-490
21	Th. 3/27	Immune	Ch. 22	686, 693-696
22	T 4/1	Immune	Ch.22	696-709
23	Th. 4/3	TEST #3		
24	T 4/8	Respiratory	Ch.17	503-506, 519-524
	Th. 4/10	MASTERS WEEK		
25	T 4/15	Respiratory	Ch.17	524-527
26	Th. 4/17	Kidney	Ch.18	543-555
27	T 4/22	Kidney	Ch.18	555-562
28	Th. 4/24	Kidney/Reproductive	Ch.24	745-753
	T 5/6	TEST #4 (During Finals time slot)		

Laboratories

1/14-1/15	No Laboratory	
1/21-1/22	Osmosis/Diffusion	
1/28-1/29	Endocrine	
2/4-2/5	No Laboratory	
2/11-2/12	Neuron	
2/18-2/19	Muscle	
2/25-2/26	Muscle	
3/4-3/5	Heart EKG	
3/11-3/12	Spring Break	
3/18-3/19	Cardiac Output PPG	

3/25-3/26	Cardiac Output Heart construct	
4/1-4/2	Blood	
4/8-4/9	No Laboratory	
4/15-4/16	Respiratory	
4/22-4/23	Kidney	