

GENERAL PHYSIOLOGY (BIO 3413)

Fall 07 Sec 001, CRN 12930

MW 11:00 – 12:15

Instructor: Helen Cronenberger, Ph.D.
hcronenberger@satx.rr.com
Office Hours: (dwntwn - FS 4.444; MW 10:00-10:45; Tel: 458-2573)
(1604 - SB 3.01.39K; MW 4:00-4:45; Tel: 458-6297)
Or by appointment

Textbook: Principals of Anatomy & Physiology, Eleventh Ed., Tortora & Derrickson, Wiley.

Prerequisite: BIO 1113 (Biology I), 1122(Lab) and 1123(Biology II) and CHE 1303 (General Chemistry II).
BIO 1143 recommended. Concurrent enrollment in BIO 3422 recommended.

Course Description: Fundamental properties and processes in the human body

Course Objectives:

- To gain an overall understanding of the various systems of the human body and their interactions.
- To relate the chemical and physiological mechanisms of these various systems in maintenance of homeostasis.
- To relate disturbances of homeostasis of body systems to disease and death.
- To gain a general understanding of the physiological basis for laboratory and medical procedures in diagnosis and intervention in order to maintain healthy life.

Grading:

4 Major exams (drop lowest, average high 3)	60%
Weekly quizzes (lowest one dropped; average remainder for)	20%
1 Final (cumulative)	20%

Letter grades will be assigned according to the following:

A = 90 - 100
B = 80 - 89
C = 70 - 79
D = 60 - 69
F = < 60

All grades will be posted on WebTV (normally within 48 hrs). Students are responsible for informing the instructor of any questions regarding grading of the exams. **Posted grades will be considered final after one week of posting on WebCT. Thereafter no changes will be considered.**

You will need ParSCORE forms for all quizzes and exams.

For weekly quizzes: 20 answers "**PasSCORE™ QUIZ FORM**".

For major exams: 50 answers each side "**Compatible with Scantron 48/TSM scanners only**".

Quizzes will not be graded if answers not turned in on proper forms or if form not properly filled out (e.g., name, ID, number 2 pencil and completely-filled boxes—lines through boxes sometimes are not seen by scanner).

GRADES WILL BE ASSIGNED ACCORDING TO THAT EARNED. A 79 AVERAGE WILL BE A GRADE OF C. Missed Exams/Quizzes: Anyone *missing an exam or quiz* will count that as the one grade to be dropped. **THERE WILL BE NO MAKE UP EXAMINATIONS AND NO CURVE. DO NOT ASK !!**

HINTS FOR STUDYING

1. Keep up with the assignments per class period. This course will cover much material, and it will be very difficult to catch up after missing even a single class assignment.
STUDY EACH DAY !!

2. **Plan to spend at least 3 hours (most likely more) studying for every in-class hour.**

3. Look at study questions after reading and learning material. Study questions should be used to evaluate your knowledge of the materials. Be sure to know the philosophy behind answers to the questions as some exam questions will be based upon the study questions.

4. Read chapters before class, take notes in class, rewrite and review notes after each class.

5. After reading the chapter and after the lecture, make an outline of each chapter to help organize the material. You should be able to recall the entire chapter without looking at your notes.

I. Macromolecules

A. Nucleic Acids

1. Bases

2. Sugars

3. Phosphate

4. Major reactions

B. Proteins

6. If a particular topic is not thoroughly understood, read that material in a different text and/or a web source (<http://www.google.com>). Reading the same topic from a different author's perspective helps understanding.

7. If something is still unclear after doing the above, then consult instructor. Reading different sources and trying to work through difficulties for understanding enhances learning

GRADING CRITERIA ARE ESTABLISHED. DO NOT ASK FOR EXTRA CREDIT, STUDY THE MATERIAL EACH DAY. NO CURVES, DO NOT ASK. CONSULT INSTRUCTOR IF SUBJECT AREAS OR QUESTIONS ARE NOT UNDERSTOOD

CLASS SYLLABUS
All material in text will not be covered.

<u>WEEK OF</u>	<u>TOPIC</u>	<u>Chapter</u>
Aug 22	Introduction to Human Body, Chemical Organization	1, 2
Aug 27	Cellular, Tissue Levels; Integumentary System	3, 4, 5
Sept 3	(Sept 3 HOLIDAY) Skeletal System, Joints	6 - 9
Sept 10	cont. Skeletal System Muscular System	10, 11
Sept 17	EXAM I (through Skeletal, Joints) cont Muscular System	
Sept 24	Nervous System	12-15
Oct 1	Senses	16, 17
Oct 8	Endocrine System	18
Oct 15	EXAM II Cardiovascular System & Blood Groups	19- 20
Oct 22	Cardiovascular System cont & Lymphatic System	21, 22
Oct 29	Respiratory System	23
Nov 5	EXAM III Digestive System	24
Nov 12	cont. Urinary System	26
Nov 19	Fluids & Electrolytes	27
November 26	EXAM IV Wrap Up	

FINAL EXAMINATION: Tue, Dec 11, 10:30 – 1:00

SCHOLASTIC DISHONESTY:

Cheating is a very serious academic offense and cannot be tolerated in any form. Information related to this issue can be found on the university website <http://www.utsa.edu/osja/scholastic.cfm> (Sec. 203. Scholastic Dishonesty)

**BIO 3422: GENERAL PHYSIOLOGY LABORATORY
COURSE OUTLINE**

DATE YEAR 2007	EXPERIMENT	CHAPTER	NOTES
8/28 – 8/31	Introduction to the Power Lab	1 & Supp. Material	
9/4 – 9/7	Osmosis, Diffusion, Tonicity and Cell Permeability	2	Quiz 1 Grade ____
9/11 – 9/14	Chemical Communication: Steroids	3	Quiz 2 Grade ____
9/18 – 9/21	Bioelectrical Communication-Organization of the Somatic Nervous System	5	Quiz 3 Grade ____
9/25 – 9/28	Bioelectrical Communication-Organization of the Autonomic Nervous System (frog heart)	6 & Supp. Material	Quiz 4 Grade ____
10/2 – 10/5	Bioelectrical Communication: Organization of the Somatic and Autonomic Nervous System (pupillary and blink reflexes)	7 & supp. Material	Quiz 5 Grade ____ MIDTERM REVIEW
10/9 – 10/12	MIDTERM	Lab 1,2,3,5,6, 7and Suppl. Material	Midterm Grade: ____
10/16 – 10/19	Muscle Contraction and human motor points	9 & Supp. Material	No Quiz
10/23/2007	Sensory Input Group Presentation	4	Quiz 6 Grade ____
10/23 – 10/26	Last Day to drop a course for grade of "W"		
10/30 – 11/2	Luminescence Group Presentation	8	Quiz 7 Grade ____
11/6 – 11/9	The Cardiovascular System	10 & supp. Material	Quiz 8 Grade ____
11/13 – 11/16	Systemic Respiration Final Review	12 & supp. Material	Quiz 9 Grade ____
11/19 – 11/23	THANKSGIVING WEEK		NO LAB MEETING
11/27 – 11/30	FINAL EXAM	—	(Labs 4,8,9,10 & 12) and suppl. material

-Please note that the instructor reserves right to change the sequence of experiments if required.

FALL 2007

COURSE SYLLABUS

BIO 3422-GENERAL PHYSIOLOGY LABORATORY

SEC	INSTRUCTOR	LAB TIME	PHONE #	EMAIL	OFFICE HOURS AND LOCATION
001	HECTOR HERNANDEZ	T 12:00-5:00 PM			
002	SOLOMON NFOR	W 1:00-6:00 PM			
003	KALYAN NALLAPARAJU	W 7:30-12:30 PM			
004	SUBBA RAO MADALA	R 7:30-12:30 PM			
005	HECTOR HERNANDEZ	R 1:00-6:00 PM			
006	SUBBA RAO MADALA	F 7:30-12:30 PM			
007	KALYAN NALLAPARAJU	F 1:00-6:00 PM			
901	HECTOR HENANDEZ	F 1:00-6:00 PM			
902	EMMANUEL AKWAR	W 1:00-6:00 PM			

COORDINATOR Pramod Kumar, Ph. D. Phone # 458-5497 Email: pramod.kumar@utsa.edu

CLASS ROOM: SB 3.01.48

TEXTBOOK: i) Experiments in Physiology: A Laboratory Guide for General, College physiology By Grimes *et al.*, and ii) Supplemental Material available on WebCT

COURSE OBJECTIVE: The objective of this course is to provide you with a basic understanding of the physiological processes in living systems employing methods and instruments of biological research. Concurrent enrollment in BIO 3413 is recommended.

COURSE OUTLINE: Please see attached sheet

GRADING POLICY and Course Policies: Please refer to your lab manual for course policies.

Grade to be allocated		
	Quizzes	20%
A = 90 or more	Lab Report and participation	20%
B = 80 – 89	Mid Term	25%
C = 70- 79	Finals	25%
D = 60 – 69	Group Presentation	10%
F = less than 60	Total	100%

EXAMINATION SCHEDULE: Please see next course outline page. Examination time will be announced later.

CLASSROOM BEHAVIOR EXPECTATION-Students are expected to assist in maintaining a classroom environment that is conducive to learning. To assure all students have the opportunity to gain from time spent in class, students are prohibited from engaging in any form of distraction. Inappropriate behavior in the classroom shall result, minimally, in a request to leave class.

There will be no make-up quizzes. Make-up examinations are given only under certain extenuating circumstances and are generally more difficult than the regularly scheduled exams. Please see attached policy sheet for details.