

BIOLOGY 252 – FUNDAMENTALS OF HUMAN ANATOMY & PHYSIOLOGY

Fall 2011 Course Information:

This course is introductory to the subjects of anatomy and physiology, but is also comprehensive meaning that there is a lot of material to be learned. The lecture will be primarily a discussion of physiology of the human body, taking a systems-approach. Anatomy, development, and histology will also be included in lecture, although the study of anatomy will primarily take place in the lab. The material taught in the lecture and the lab will be tested separately but the grades combined for the final course grade.

Lecture: Sections 001-003 meet TR at 12:30-1:45pm in Carrington Hall, Room 09

Laboratory: Is a co-requisite. You CANNOT take the lecture without the lab. Labs will be taught by Teaching Assistants, coordinated by me. If you have a problem with lab, try to work things out with your TA before bringing it to my attention. You will also have an undergraduate Lab Intern who is a veteran of the course and is there to help you. If you'd like to become a lab intern, please speak with me late in the semester (and see course description for BIOL 291).

Prerequisites: BIOL 101 & 101L. A reasonable understanding of biological chemistry, cellular function, genetics and inheritance is assumed. If you scored below a B- in BIOL 101, you may have trouble in this course. Please read chapters 1-4 for the appropriate background.

About your Instructor:

Dr. Corey Johnson: I received my Ph.D. in Cell & Developmental Biology from the UNC Medical School in 2006 where I studied anatomy and developmental biology. I regularly teach BIOL 276 (Comparative Vertebrate Anatomy) BIOL 472 (Mammalian Morphology and Adaptation).

Contact me by email: johnsonc@bio.unc.edu or in person. I'm difficult to reach by phone and I dislike voicemail. I am 100% committed to being available to answer questions or explain difficult material, so if you need help in understanding anything, please stop by for help during office hours or email your question.

Office hours:

2-4pm Tuesdays and Thursdays in Wilson 104A. I will also meet anytime I am able, outside of those hours (by appointment) for those who cannot make it during regular office hours.

Lecture Textbook:

Anatomy & Physiology: The Unity of Form and Function, by K. Saladin. 6th edition. This book or the 5th edition may be purchased with a software license for *Connect*. An ebook version is also available at a reduced cost. Please see the announcement on Sakai: "**Textbook options.**"

Lab Manual: For lab, you will receive all relevant information through your lab's Sakai site. The software *Connect* that is available with your text will be used in the lab. The lab manual will be provided in electronic format, free of charge.

A short philosophy of testing

I believe strongly in offering a difficult course that challenges the student. The student who receives an 'A' will have mastery of the subject matter (as is recommended by the university's guidelines).

- The testing for this course will be based on the assigned readings with an emphasis on lectures.
- The **textbook** is an essential resource. The information contained within it is far better than anything that will come out of my mouth. It has been scrutinized for grammar, accuracy, and effectiveness of pedagogy. Therefore, you can assume that by reading AND studying the text you will be learning the highest quality of information.
- The **powerpoint slides** are tools for presentation and learning, but they DO NOT contain the entirety of information that will be expected of you. If entire textbooks could be distilled to a few dozen powerpoint files, textbooks wouldn't be so darn big. Powerpoint presentations by design carry as much information with as few words as possible. Keep this in mind when you decide how to study for an exam made entirely of words.

Grading policy and other information:

Outside of lecture, I will make any important information known through the 'announcements' section of Sakai so be sure to check it often. Grades will be posted to Sakai as soon as they are available after exams. Your grade for this course will be determined by 3 non-cumulative exams and lab as follows:

Exams (3 x 23%): Three non-cumulative exams will be given: 69% of total grade

Connect assignments (6%): Assignments on *Connect*, TBA

Lab (25%): The required lab comprises 25% of your final grade. There is no separate grade for lab. This will work in your favor, since lab grades are typically a little higher than lecture exam grades. Your TA will explain the details of lab grading.

READ THIS, IF NOTHING ELSE: If you decide to remain enrolled in this course, make sure you are willing to take the grade you deserve based on your performance. You will be graded on the basis of your performance, not your improvement. No exams grades will be dropped.

Grading scale:

93.0-100	A	87.0-89.9	B+	77.0-79.9	C+	67.0-69.9	D+
90.0-92.9	A-	83.0-86.9	B	73.0-76.9	C	60.0-66.9	D
		80.0-82.9	B-	70.0-72.9	C-	<60	F

BIOLOGY 252 –LECTURE SCHEDULE

Date			Lecture Topic	Chapter
T	Aug	23	Course intro; Intro to Nervous System	12
R	Aug	25	Neurophysiology: action potentials and graded potentials	12
T	Aug	30	Autonomic nervous system	15
R	Sept	1	Olfaction, Gustation	16
T	Sept	6	Vision	16
R	Sept	8	Equilibrium and hearing	16
T	Sept	13	The Integumentary system	6
R	Sept	15	Bone structure and function	7
T	Sept	20	Catch up	-
R	Sept	22	Exam I	5-7,12,15,16
T	Sept	27	Intro to muscular system	10
R	Sept	29	Excitation-contraction coupling, energy, performance	10
T	Oct	4	Intro to Endocrine System	17
R	Oct	6	Hypothalamus, Pituitary, and their targets	17
T	Oct	11	Other endocrine organs	17
R	Oct	13	Blood	18
T	Oct	18	Immune system	21
R	Oct	20	FALL BREAK	-
T	Oct	25	Renal physiology; glomerular filtration	23
R	Oct	27	Renal physiology continued	23
T	Nov	1	pH, ionic balance	24
R	Nov	3	Exam II	10,17,18,21,23
T	Nov	8	Heart electrophysiology	19
R	Nov	10	Blood flow, cardiac cycle, & cardiac output	19
T	Nov	15	Blood vessels, circulation	20
R	Nov	17	Respiratory system	22
T	Nov	22	Digestive system	25
R	Nov	24	HOLIDAY	-
T	Nov	29	Digestive system	25
R	Dec	1	Male reproductive System; Female anatomy	27
T	Dec	6	Uterine/ovarian cycles; hormonal regulation	28
T	Dec	15	Exam III: 12pm Carrington Hall 09	19,20,22,25,27,28

IN ADDITION, SELF-DIRECTED STUDY UNITS WILL BE ASSIGNED:

- CHAPTER 3, CELLULAR FORM & FUNCTION
- CHAPTER 5, INTRO TO HISTOLOGY
- CHAPTER 21, LYMPHATIC SYSTEM

BIOL 252 LABORATORY SCHEDULE

Week of...	Lab Topic
Aug 29-2	Nervous System: Brain Anatomy, Meninges
Sept 12-16	Nervous System: Spinal cord, Spinal nerve
Sept 19-23	Skeleton
Sept 28-4	Lab Exam I
Oct 5-11	Muscles of Upper limb
Oct 12-18	Muscles of Lower limb
Oct 24-28	Lab Exam II
Oct 31-4	Cardiovascular and respiratory systems
Nov 7-11	Digestive & Urogenital Systems
Nov 14-18	Lab Exam III

IN ADDITION, A SELF-DIRECTED STUDY UNITS ON ANATOMICAL TERMINOLOGY AND THE ORGANIZATION OF THE BODY WILL BE ASSIGNED