

BIOL 252 Human Anatomy and Physiology Dr. Gidi Shemer

Spring 2019 TR 11:00- 12:15 GSB 200 Sections 003-004

Human A&P is an advanced course that investigates the form and the function of the human body. You should expect a comprehensive, demanding, and rigorous class in the next semester.

The course is composed of two class meetings each week. Most of you will also take the lab (252L). The lab will get into the details of the anatomy of the human body. The course itself will focus on how human physiology follows our basic anatomy, and will cover our twelve body systems. **This is NOT a class for passive learners. You are expected to be actively engaged in this course through class discussions, class activities and pre- as well as post-lecture assignments and readings.** You are expected to **visit peer-mentors** routinely. Don't wait. Check in regularly, maybe with a buddy or small group. Form your own study groups too. Attend **SI sessions** to review material with your SI leaders.

For a detailed schedule, please read the "detailed scheduled" document on Sakai (under "Syllabus")

Prerequisites

BIOL 101 and BIOL 101L

Your Instructor

Dr. Gidi Shemer

Coker Hall 213A

Office hours: Check the course Sakai site

Web page: <http://www.bio.unc.edu/Faculty/Shemer/>

Email: bishemer@email.unc.edu



Supplemental Instruction (SI)

Miriam Chisholm

Maddy Johnson

Course Learning Outcomes

At the end of this semester you should be able to:

- Define anatomy and physiology and explain the relationship between structure and function
- Define homeostasis and explain why it is important for proper body functions
- Predict the physiological outcomes of homeostatic imbalances
- Describe the organization of each of the twelve organ systems of the human body
- Integrate the knowledge you gained in different parts of the course
- Apply one's knowledge of human anatomy and physiology to real life examples

Textbook

The textbook comes with a web-based software package called MasteringAP that will be the platform through which you will be quizzed and receive short pre-lecture assignments. The package also includes an interactive eBook. There are also other purchase options of the textbook. Details on the purchase options can be found on the Sakai Syllabus folder and the file "Details about eBook and purchase options"

In order to register to MasteringAP, check the Sakai Syllabus folder and the file "MasteringAP registration instructions" (**enrollment into the MasteringAP course will start**). Course ID is- *shemer03485*

Peer-mentors

Several of my best students who excelled in this class in the past will serve as peer mentors. They will be present in class and assist during class activities and each will **offer a weekly hour and a half of one-on-one mentoring session** (check piazza and our sakai site for updated mentoring session hrs.)

Supplemental Instruction (SI)

Twice a week, we will offer supplemental instruction (SI) sessions (days- TBA). The sessions will be led by two undergraduate students who excelled in this class in the past and already served as peer mentors. The SI sessions will allow you to process and actively practice material that was taught in the previous week. Students referred to the SI sessions in the past as one of the most significant tools that improved their learning

Class Attendance

Students are expected to attend and participate in class meetings. **Most of the material discussed in lecture will not be found in the textbook.** You are responsible **for all material and announcements made in lectures.** You are also responsible for material **covered by your assigned reading and voicethread online lectures** (see below)

Assignments

Each week you will have **pre-class, in-class, and post-class assignments:**

- The pre-class assignments will be based on **assigned readings from the textbook** and in some cases- **online lectures** that you will view via the **VoiceThread** tool on Sakai. The assignments will be given via the **MasteringAP** system and via **Sakai Assignments**
- In-class assignments will include **Learning Catalytics** (see below), note cards, and other activities
- Post-class assignments will include mostly **Peerwise** assignments (see below)

The due dates for submitting your assignments can be found on the **class detailed schedule** posted on Sakai. **I will NOT send reminders. You are responsible to follow the schedule and submit the assignments on time.** There will be no "second chances" in this case. Make sure you check the schedule and plan your time carefully. The time for all **due dates is 10:00 am**

Interactive educational tools

Learning Catalytics

During class time we will use Learning Catalytics (LC), an interactive program that will allow you to participate in assignments through your device. LC comes as part of a package when you purchase the MasteringAP and the textbook. For accessing LC, check the Sakai Syllabus folder and the file "Learning Catalytics access instructions"

PeerWise

One of your assignments during the semester will be to create multiple choice questions that address the material we learn. Asking questions and evaluate your peers' questions has been shown to be an invaluable tool in developing deep learning. Posting and reviewing questions will be done through an interactive system called PeerWise. Instructions on how to register and how to use PeerWise will be given during the semester.

VoiceThread

In addition to the readings, in some cases the background will be given as mini-lectures that you will access through the VoiceThread tool on Sakai. We will also use this system to cover the **Integumentary system** and the **Respiratory system** that will not be covered during class meetings.

Piazza

We will be using an online platform called "Piazza" this semester. You may post any questions that you have about the course to this site at any time and they will be answered by either a fellow student, a mentor, or me. Your questions may be more general and may relate to the course itself or they may be more specific and instead relate directly to content and/or material from class. You should not post anything unrelated to the class. No personal attacks or usage of offensive language will be allowed. No posts that directly give the answers to assignments are allowed. For instance "The answer to #5 is C". That being said, you are allowed to ask questions concerning the assignments, and your classmates are allowed to respond, as long as the conceptual framework is being discussed.

Grading

Your grade for this course will be determined as follows:

3 midterm exams + 1 (non-cumulative) final exam = 21% each	= 84%
MasteringAP assignments	= 6%
Assignments [PeerWise (2), Sakai (4), LC (4)]	= 10%

Letter grades will not be assigned for individual exams, only scores. Final letter grades will be assigned based on the total number of points for the entire semester:

A (93-100) A- (90-92) B+ (87-89) B (83-86) B- (80-82) C+ (77-79) C (73-76) C- (70-72) D+ (66-69) D (60-65) F (<60)

Your grade will be based on your performance and not on comparing your performance to your peers'. Exam questions will be taken from lectures, assigned readings, and pre-class online lectures. **Grades will not round up.** B= 83, NOT 82.96. Exams must be taken on the dates indicated during the regular class period; no makeup exams except in special circumstances, i.e. medical or family emergency documented in writing.

All course materials including your notes and assignments are covered by University Copyright Policy, @ <http://www.unc.edu/campus/policies/copyright%20policy%2000008319.pdf>

This means it is illegal and an honor code offense to share your notes or any other course materials with anyone not directly affiliated with this class.

THE PROFESSOR RESERVES THE RIGHT TO MAKE CHANGES TO THE SYLLABUS, INCLUDING PROJECT DUE DATES AND TEST DATES. THESE CHANGES WILL BE ANNOUNCED AS EARLY AS POSSIBLE.

Schedule Below you will find a general schedule. This schedule might change during the semester. For a detailed schedule, including assigned readings and assignments schedule, please read the **Detailed course schedule** found on our Sakai website under the Syllabus folder

Date			Class		Lab
R	Jan	10	1	Introduction to A&P and to the nervous system	
T	Jan	15	2	Cells of the nervous system	Spinal cord
R	Jan	17	3	Neurophysiology- membrane potentials	
T	Jan	22	4	Action potential	
R	Jan	24	5	Synaptic activity	
T	Jan	29	6	Brain I	Brain
R	Jan	31	7	Brain II	
T	Feb	5	8	Sensation	Axial Skeleton
R	Feb	7		EXAM I (Nervous system)	
T	Feb	12	9	Endocrine System I: Basic mechanisms and hypothalamic control	Lab Exam I
R	Feb	14	10	Endocrine System II: other glands	
T	Feb	19	11	Skeletal System I: Bone structure and function	Appendicular Skeleton
R	Feb	21	12	Skeletal System II: Bone growth and development	
T	Feb	26	13	Muscular System I: How the muscle cell contracts	Muscles of Upper limb
R	Feb	28	14	Muscular System II: Physiology of the muscle organ	
T	March	5	15	Muscular System III	Muscles of Lower limb
R	March	7		EXAM II (Endocrine Skeletal, Muscular)	
T	March	12		SPRING BREAK	
R	March	14		SPRING BREAK	
T	March	19	16	Cardiovascular System I	Lab Exam II
R	March	21	17	Cardiovascular System II	
T	March	26	18	Cardiovascular System III	Cardiovascular & respiratory
R	March	28	19	Cardiovascular System IV	
T	April	2	20	Immune system I + Integumentary online	Digestive & Urogenital
R	April	4		EXAM III (Cardiovascular, Immune, Integumentary)	
T	April	9	21	Digestive System I	Lab Exam III
R	April	11	22	Digestive System II + Respiratory online	
T	April	16	23	Digestive System III; Urinary System I	
R	April	18	24	Urinary System II -reabsorption and regulation	
T	April	23	25	Reproductive system- male	
R	April	25	26	Reproductive system- female	
M	April	29		FINAL EXAM (noon) (Respiratory, Digestive, Urinary, Reproductiv	