HUMAN FUNCTIONAL ANATOMY
ANTH 3401
SYLLABUS, SPRING 2018

INSTRUCTOR: Ashley S. Hammond, Ph.D.
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Office Hours: Wednesday 9:00-11:00am

TIME: MW, 2:20-3:35 pm
LOCATION: Elliott School, Room 309

COURSE DESCRIPTION:
This course is designed to give you good grounding in the fundamentals of human (and to a lesser extent nonhuman primate) anatomy. Specifically, we will investigate anatomical structure as it relates to function, picking out key features of our anatomy that distinguish humans and other primates from other organisms. We will start with the basics of anatomy, quickly moving into bones, muscles, and nervous system before spending time on specific regions of the body and special senses. We will cover the basic anatomy, development and function of these regions and systems, building labs into the schedule where possible. By examining anatomy and function in an evolutionary context, we will explore how the human body works and why it works the way it does. No prior knowledge of anatomy is required.

COURSE PREREQUISITE: ANTH 1001 (formerly ANTH 001)

LEARNING OBJECTIVES: At the end of this course, students should be able to:
(1) Demonstrate an understanding of anatomical terminology;
(2) Identify major anatomical structures in the body;
(3) Demonstrate knowledge and understanding of how major anatomical systems and regions function;
(4) Understand the scientific method and how it is used to test hypotheses about functional anatomy;
(5) Apply anatomical knowledge learned in lecture and exercises to cadaveric prosections.

COURSE MECHANICS:
REQUIRED TEXTBOOK AND OTHER READINGS:
There are two required texts for this course:
1. Langdon, JH (2005). *The Human Strategy: An Evolutionary Perspective on Human Anatomy*. New York, Oxford University Press. ISBN 0-19-516735-X
2. Grine FE (2014) *Regional Human Anatomy: A Laboratory Workbook for Use with Models and Prosections (5th Edition)*. Boston: McGraw-Hill. ISBN 0073378283 / 9780073378282.

In addition to these texts, relevant articles from scientific journals may be assigned to support certain topics discussed in class. These should also be considered required readings, and will be posted to Blackboard during the week prior to the relevant class meeting. I may also occasionally post links to video footage available on the web. ***It is important that you come to class having completed all required readings and prepared to contribute to class.*** Material from both the lecture and readings may appear on exams.

EVALUATION:
Your final course grade will be based on the following work. Grades are calculated out of 100 points, but a total of 103 points is possible with the extra credit that is available.

20 points	Exam 1
20 points	Exam 2
20 points	Exam 3
20 points	5 Combined Quizzes*
10 points	Laboratory Workbook
10 points	Final Project
up to 3 points	Extra Credit Opportunity

The correspondence between points and final letter grades followed in the course is listed below. Grades will not be curved.

A	92.5 – 103
A-	89.5 – 92.4
B+	86.5 – 89.4
B	82.5 – 86.4
B-	79.5 – 82.4
C+	76.5 – 79.4
C	72.5 – 76.4
C-	69.5 – 72.4
D+	66.5 – 69.4
D	62.5 – 66.4
D-	59.5 – 62.4
F	59.4 and below

(1) EXAMS: There will be three exams in this class, each based on material covered during previous class meetings and in your required readings. The format for these exams will primarily be multiple choice, matching, and short response. The second and third exams will not be explicitly cumulative, although they will rely on foundational knowledge developed throughout the first and second parts of the semester.

(2) REGIONAL HUMAN ANATOMY WORKBOOK: Anatomy is learned not only by reading, but also by practice. Therefore, exercises will be assigned in the Grine (2014) workbook on a weekly basis, to help you learn the basic features of anatomy we will be covering in class. You are expected to keep up with these exercises weekly, and come to class prepared to recognize the anatomical terms and structures we will be discussing in more detail. ***We have a lot of ground to cover in class, so it is expected that you will have completed the relevant workbook exercises before coming to class. You will be required to hand in your anatomy workbook three times during the course of the semester for grading.***

(3) LECTURE AND LABORATORY QUIZZES: Quizzes will be administered throughout the course, based on material covered in lecture and our visits to the Ross Hall cadaver lab*. These are designed to give you some practice testing your knowledge as we move through the course. The format of these quizzes may include identification, matching, multiple choice, true/false, diagram labelling, and short response. There are 6 quizzes scheduled during this course, but note that I will drop your lowest quiz grade (taking the average of the 5 best scores). The 5 quizzes included in your overall grade are worth 4 points each (total of 20 points).
***Please see the section on Gross Anatomy Laboratory Visits for more information about Lab Quizzes**

(4) FINAL PROJECT: Your final project will be a 5 page lab workbook supplement of your own creation. You will design additional lab workbook pages towards Grine's Human Functional Anatomy, covering topics that were not covered in Grine's lab workbook. Creativity in this project is encouraged! A grading rubric will be distributed early in the semester.

(5) EXTRA CREDIT OPPORTUNITY**:** Up to 3 points of extra credit towards your *final grade* are possible. If you would like extra credit, I will grant 1 point for a 1 page double-spaced summary of a poster at GW's spring Research Days symposium on Tuesday April 10th (https://researchdays.gwu.edu/). You may do this for up to 3 posters, and therefore receive up to 3 extra credit points total. Please select posters that have an anatomically-based research questions, or those that focus on human or nonhuman primate biology. Additional guidelines for the extra credit opportunity will be distributed. The extra credit is due on April 16th in class. There are no other sources of extra credit possible in this course.

CLASS POLICIES & OTHER INFORMATION:

BLACKBOARD: Once you are registered for this course, you will automatically have access to the Blackboard site associated with it. Go to **https://blackboard.gwu.edu/** and sign in using your email ID and password. We will use Blackboard to communicate announcements, store important documents and external links to web sites of interest that deal with material covered in the course, and provide a way for you to check your grades as the course progresses.

ATTENDANCE: Attendance is critical to doing well in this course, as is keeping up with the readings. Material from lectures, labs, and readings will be tested on the exams. Further, knowledge will be cumulative, and we will refer back to previous topics in our weekly lectures and discussions. Classes should not be missed except for reasons beyond your control and for which you can provide documentation, such as illness, family emergencies, or participating in university-sanctioned activities.

INDEPENDENT LEARNING: Anatomy is a topic that requires substantial review and cannot be learned simply from attending lecture, and so you will need to be prepared to do a substantial amount of independent learning. It is important that you come to class having completed all required readings and assignments. It is also important that you review each lecture and class notes after each lecture in order to really learn the material. According to GW's credit hour policy, a 3-credit course is expected to require a ***minimum* of 5 hours of out-of-class learning per week**. [For anatomy courses, I would emphasize that 5 hours should be considered the absolute minimum of study time per week!] More information about GW's credit hour policy can be found at provost.gwu.edu/policies- forms

LATE WORK / MISSED EXAMS: Late assignments and make up exams will **only** be granted in very limited circumstances, when there is a valid (i.e., medical, religious) justification. In such cases, you are required to notify me **prior** to the scheduled exam date / due date. Documentation verifying a medical or other emergency will be required. If a make-up assessment is granted, it is up to the instructor's discretion in regards to the format of the make-up exam. Late workbook assignments will result in lowering of your final workbook grade by 1 point (or one letter grade) for each day the assignment is late.

RELIGIOUS HOLIDAYS: It is completely acceptable for you to miss class meeting(s) due to observance of a religious holiday, without penalty. However, it is your responsibility to look ahead on the calendar, and notify me no later than the **first week of the semester (no later than January 21st)** of your intention to be absent from class on the day(s) of religious observance.

ACADEMIC INTEGRITY: I personally support the GW Code of Academic Integrity, and will addresses violations of this code accordingly. It states: "Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information." It is your responsibility to read and understand this and other stipulations of GW's Code of Academic Integrity, and complete all class work in accordance with this code. For the remainder of the code, see: http://www.gwu.edu/~ntegrity/code.html

SUPPORT FOR STUDENTS OUTSIDE OF THE CLASSROOM:
Disability Support Services (DSS). Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. It is your responsibility to contact DSS and notify me no later than the **first week of the semester (no later than January 21st)** of your request for accommodations. For additional information, please refer to http://gwired.gwu.edu/dss/

University Counseling Center (UCC). The Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations; and confidential assessment, counseling services (individual and small group), and referrals. You can reach the UCC at 202-994-5300. For additional information, please refer to http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices

SECURITY: In the case of emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After the evacuation, seek shelter at a predetermined rendezvous location.

ADDITIONAL INFORMATION REGARDING GROSS ANATOMY LABORATORY VISITS:

This class is designed primarily as a lecture-based course, but we will incorporate three gross anatomy laboratory visits to give you practical experience with the information you are learning in class. You will not be dissecting the cadavers, but learning in the lab is 'hands-on' and you will have to manipulate and interact with anatomical structures. With a focus on what we have covered in lecture, I will demonstrate anatomy on the cadavers, reviewing concepts and structures we have covered in lecture, and answer questions. In the last 30 minutes of lab classes, there will be a brief quiz testing on key structures discussed in both lecture and lab.

LOCATION: Gross anatomy laboratory visits will occur in the human cadaver lab at Ross Hall. In lieu of our normal meeting location, we will meet in front of Ross Hall (the entrance faces the Foggy Bottom Metro Station).

ABSENCES: We are scheduled to be in the laboratory on Mondays **February 12, March 19, and April 2** during normal class time (2:20-3:35 pm). ***Given the mechanics of the cadaver labs, make-ups are not possible.*** Thus, it is important that you attend, unless an illness or emergency prevents you from doing so. Remember that I will drop your lowest quiz grade, essentially giving you one free pass if there is an emergency that precludes your attendance one day.

LAB CONDUCT AND CLOTHING: Gross anatomy laboratory visits have been generously made possible by the GW School of Medicine, the donors, and the families of the donors. The opportunity to study the human body is a great privilege and you are

expected to show the highest level of respect to the human donors. Photography, cell phones, and other electronic devices are prohibited in the lab. We will discuss laboratory etiquette more in class prior to the first lab visit. You will not need special equipment or attire, but are required to wear pants and closed-toed shoes (i.e., sneakers) in the lab. It can also be chilly in the lab, so I recommend a light sweater as well. Lab policies require eyeglasses be worn in lieu of contact lenses. Gloves, disposable lab coats, and other protective clothing will be provided in the lab.

SCHEDULE OF TOPICS AND READINGS

This schedule is subject to change as we move through the course. All schedule changes will be announced in lecture and posted to Blackboard. Remember, readings and workbook assignments should be completed before class. I recommend that you check Blackboard regularly for the most current course syllabus & schedule, as well as general course updates and links to extra materials that will be helpful.

WK	DATE	TOPIC	LANGDON Chapters	GRINE WORKBOOK Pages completed	WHAT IS DUE? (in class)
1	Jan. 17	Introduction to course			
2	Jan. 22	Approaches and Fundamentals	1-2	2-9	
	Jan. 24	Bone, Cartilage and Muscle	3	11-23	
3	Jan. 29	Nervous system	10-11	24-39, 212-215, 312-313	
	Jan. 31	Skull and Face	4	184-190	**LECTURE QUIZ 1**
4	Feb. 5	Spine, Back, and Tails	6	40-45	
	Feb. 7	Anatomy of Upper Limb; Touch and Grasping	7	48-53, 70-87	
5	Feb. 12	GROSS LAB VISIT			**LAB QUIZ 1**
	Feb. 14	**EXAM 1**		**[TURN IN]**	**WORKBOOK**
6	Feb. 19	NO CLASS (PRESIDENT'S DAY)			
	Feb. 21	Anatomy of Lower Limb & Locomotion (1/2)	8		
7	Feb. 26	Anatomy of Lower Limb & Locomotion (2/2)	9	94-105, 121-142	
	Feb. 28	The Pelvis: Bipedalism and Birth	19-20	360-363	
8	Mar. 5	Reproductive Anatomy I: Male		376-385	
	Mar. 7	Reproductive Anatomy II: Female		386-395, 270-271	**LECTURE QUIZ 2**
	Mar. 12	NO CLASS (SPRING BREAK)			
	Mar. 14	NO CLASS (SPRING BREAK)			
9	Mar. 19	GROSS LAB VISIT			**LAB QUIZ 2**
	Mar. 21	Review for Exam			
10	Mar. 26	**EXAM 2**		**[TURN IN]**	**WORKBOOK**
	Mar. 28	Digestive System: Anatomy and Diet	14		
11	Apr. 2	GROSS LAB VISIT		328-338	**LAB QUIZ 3**
	Apr. 4	Teeth: Development, Anatomy, Diet	5	191-203	
12	Apr. 9	Olfaction, Respiration, Vocalization	12, 15	228-229, 272-287	
	Apr. 11	NO CLASS (AH at CONFERENCE)			
13	Apr. 16	Eyes: Anatomy, Vision, and a Colorful World!		230-235, 244-257	**EXTRA CREDIT**
	Apr. 18	Ears: Anatomy, Hearing, Balance		236-241, 258-267	**LECTURE QUIZ 3**
14	Apr. 23	Anatomical Variation	13, 18		
	Apr. 25	Life History	21	**[TURN IN]**	**WORKBOOK**
15	Apr. 30	Review for Exam			**FINAL PROJECT**
	TBD	**EXAM 3**			