



Human Anatomy

AS.020.375

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Course Description: This course is an introduction to human gross anatomy, covering all areas of the human body in sufficient detail to create a vocabulary and foundation of knowledge for further study. We will take a regional approach to learning the structure and function of human anatomy at the organ level (i.e., focusing on parts of organs rather than tissue types and cell populations). For this course, we will cover the body in three separate units: 1) Thorax, Abdomen, Pelvis & Perineum (TAPP); 2) Limbs; and 3) Head & Neck. The course is designed to be challenging and requires persistent effort. Success in this course requires a major commitment of time for studying outside of class.

Intended Learning Outcomes: By the end of the course, the student should be able to do the following:

- You will become fluent in the terminology and vocabulary used to describe the human body.
- You will be able to identify specific structures on photos, clinical imaging (e.g., radiographs, CT, MRI), 2D and 3D schematic images of the body.
- You will be able to describe the spatial relationships of important anatomical structures.
- You will apply your knowledge of organ structure and function to explain the normal workings of the body.

Texts and Online Materials

Recommended Text:

Drake, Vogel, Mitchell. 2015. *Gray's Anatomy for Students* 3rd Edition. Churchill, Livingstone, Elsevier, Philadelphia PA.

This textbook is not required for the course, and is considered a reference for you should you want a deeper explanation on a topic or to review a topic from another perspective. As a result, the readings listed are not mandatory but instead direct you to relevant pages for a particular lecture.

Online Atlases:

Anatomy.TV Powered by Primal Pictures (Required)

This online resource is available to the Hopkins community and can be found through the Johns Hopkins Library Catalyst online database by searching for "Anatomy.TV" or "Primal Pictures".

Thieme Teaching Assistant Anatomy (Optional)

This online resource is available to the Hopkins community and can be found through the Johns Hopkins Libraries Catalyst online database by searching for "Thieme Teaching Assistant". You can also link directly to the resource online via the following link: www.thiemeteachingassistant.com/Home

Several textbooks and anatomical atlases are available for use through this website, and you are encouraged to explore any or all of them. The two listed below are the most general and most relevant for the course. After selecting one of the texts/resources, you can search for particular anatomical structures or navigate through the book by anatomical regions.

Gilroy AM, MacPherson BR, Schuenke M, Schulte M, Schumacher U. 2016. *Atlas of Anatomy*, 3rd Edition. Thieme, New York.

Gilroy AM. 2013. *Anatomy – An Essential Textbook*. Thieme, New York.

Online Lab Component

The ability to explore the human body visually is an integral part of the anatomy learning experience. Logistically, we are unable to use cadaver dissections for this course. We will, however, take advantage of excellent 3D virtual reconstructions of human anatomy available online. You will receive regular assignments to complete at the **Anatomy.TV** website (accessed via the JHU library portal). You are allowed to work with classmates, but **each individual student** must complete and submit each assignment via Blackboard.

Course website

Access the course website via the JHU Blackboard site: blackboard.jhu.edu. You are encouraged to check the site often as course announcements will be posted to Blackboard, including any schedule changes. In addition, online lab assignments will be completed and submitted via Blackboard and office hours/discussion boards will be conducted on the site.

Office Hours

Dr. Sylvester's office is located on the East Baltimore campus, and you are welcome to drop by during office hours. In addition, the teaching assistants will conduct online office hours using a moderated discussion board in Blackboard. During scheduled times, at least one teaching assistant will be available to discuss any questions about the material. Threads will be organized by day and topic, and will remain online for all students to review.

Communication

The best way to contact Dr. Sylvester or the teaching assistants is via email. Please use "Human Anatomy" in the subject line.

Evaluation and grading

Grades are based primarily on three exams. There is one exam for each of the three units of the course: 1) Thorax, Abdomen, Pelvis & Perineum (**25%**); Limbs (**25%**); Head & Neck (**26%**). Exams will be a combination of objective (e.g. multiple choice, true/false) and short answer/essay question. The other **24%** of your grade will be based on your submission of 12 online lab assignments (Anatomy.TV, see above), each of which will be worth 2% of your grade. The exams are not cumulative in the strictest sense, however some basic anatomical terminology is used throughout the course.

Letter grade	Percentage Points
A+	98-100%
A	92-97%
A-	90-91%
B+	87-89%
B	82-86%
B-	80-81%
C+	77-79%
C	72-76%
C-	70-71%
D+	67-69%
D	60-66%
F	<60%

Make-up Policy

Short of legitimate athletic, religious, legal or medical reasons, you will not be eligible to take examinations at any time other than those officially designated. If you must miss an exam, you must contact Dr. Sylvester **before** the exam is administered. If you miss an exam, make-up exams **may** be allowed under extraordinary circumstances. These will be written exams administered at Dr. Sylvester's office on the East Baltimore campus.

Study Groups

You are strongly encouraged to work in study groups (4 people is a good number). Although it is possible to successfully learn anatomy on your own, peer interaction and repeatedly testing each other can aid significantly in helping you to assimilate the material. Teaching anatomy is the best way to learn anatomy, so you are encouraged to include classmates with different levels of prior knowledge. If you want to be part of a study group, but are having trouble finding one, please don't hesitate to contact Dr. Sylvester or the teaching assistants.

Getting the most out of this course

Any course in human anatomy is challenging but rewarding. Many of you are taking this course in preparation for a professional career in which anatomical knowledge is essential. Others of you are taking this course for personal reasons. Either way, you are not learning this information for the exam, but for the rest of your life, professional or otherwise.

You are encouraged to read the textbook. It is to your advantage to spend time each day learning the newer material and reviewing older material. Cramming for anatomy may provide short term gains, but ones which will be lost rapidly. Much of anatomical knowledge involves integrating function with complex spatial relationships and so continuous effort is required. Drawing (even schematic representations) of anatomy is extremely useful. Create tables of structures and their functions. These techniques will help you much more than "all-nighters" before the exams.

Academic Integrity

Simply stated – don't cheat. Students in this course will be held to the strictest interpretation of the academic ethics and integrity standards of Johns Hopkins University. If you are unfamiliar with the university's policies, you can find them here:

<http://e-catalog.jhu.edu/undergrad-students/student-life-policies/>

Students with disabilities

Students with disabilities who require accommodations for this course should contact Student Disability Services at 3400 North Charles Street, Garland Hall, Suite 385 (Phone: 410-516-4720 Email: studentdisabilityservices@jhu.edu). Please also contact Dr. Sylvester after you contact Student Disability Services to make adjustments that suit your needs.

Course schedule

All assigned readings refer to *Gray's Anatomy for Students* 3rd Edition.

Week	Date	Lecture	Associated Reading	Assignment Due
1	Tues January 29	Introduction; Anatomical terminology	pp. 2-4; 12-50	
	Thurs January 31	Thorax and respiration	pp. 123-128; 139-173	
2	Tues February 5	Heart and mediastinum	pp. 180-206; 209-216	Lab Activity 1
	Thurs February 7	Introduction to the nervous system	pp. 31-46	
3	Tues February 12	Abdomen I	pp. 277-288; 292-300	Lab Activity 2
	Thurs February 14	Abdomen II	pp. 303-364	
4	Tues February 19	Pelvis & Perineum I	pp. 441-485	Lab Activity 3
	Thurs February 21	Pelvis & Perineum II	pp. 486-518	
5	Tues February 26	Exam 1: TAPP		Lab Activity 4
	Thurs February 28	Introduction to muscles and joints	pp. 12-23; 25-26	
6	Tues March 5	Thigh, hip and knee	pp. 558-615	
	Thurs March 7	Leg, ankle and foot	pp. 618-662	
7	Tues March 12	Back and shoulder	pp. 64-72; 84-99; 702-731	Lab Activity 5
	Thurs March 14	Brachial Plexus and Elbow	pp. 738-747; 750-770	
8	Tues March 19	Spring Break (No lecture)		
	Thurs March 21	Spring Break (No lecture)		

9	Tues March 26	Forearm and wrist	pp. 771-792	Lab Activity 6
	Thurs March 28	Intrinsic hand (Online module)	pp. 792-818	
10	Tues April 2	Exam 2: Limbs		Lab Activity 7
	Thurs April 4	Introduction to the Head	pp. 855-886; 922	
11	Tues April 9	No lecture (EB)		Lab Activity 8
	Thurs April 11	Cranial nerves	pp. 894-900	
12	Tues April 16	Orbit and eye	pp. 927-953	Lab Activity 9
	Thurs April 18	Face and temporal region	pp. 904-921; 972-991	
13	Tues April 23	Ear	pp. 953-971	Lab Activity 10
	Thurs April 25	Nasal cavity, sinuses, and mouth	pp. 1069-1119	
14	Tues April 30	Nerves and muscles of the neck	pp. 1000-1037	Lab Activity 11
	Thurs May 2	Larynx and pharynx	pp. 1040-1068	
	Exam Period TBA	Exam 3: Head and Neck		Lab Activity 12