

BIOL 252L: Fundamentals of Human Anatomy & Physiology Laboratory

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Fall 2019 Course Goals and Student Expectations:

The BIOL 252L lab presents human structure and function using a hands-on approach utilizing anatomical models and preserved human organ specimens. Dissection is kept to a minimum due to time constraints and huge number of students in this course (500 per semester). Since this is only a one-semester A&P course (252 & 252L), lab will run parallel with lecture, but will not often intersect. In the lab, we will learn gross (visible) anatomy. In addition to simply naming the parts, we will learn the function and relative position of structures in the body. You are expected to read the laboratory text chapter being covered prior to lab. This is your responsibility to yourself and to your lab partners. Prelab assignments will be made available for you to complete before lab as a means of insuring a minimum of preparation prior to lab.

Lab Schedule:

Labs will meet once a week at the assigned time and room.

Required Materials:

We will be using Complete Anatomy available for purchase here: 3d4med.com/unc. This application will be a resource for your study, as well as a platform for a component of your grade. You will learn about how to use it during lab orientation. The laboratory text is available FREE and is found on Sakai (sakai.unc.edu).

Homework:

The pre-laboratory assignments will be delivered through Complete Anatomy. Expect approximately 30-45 minutes of video watching plus an additional 5 minutes to complete quizzes for each day of lab. This will need to be completed before lab. 1 assignment per day of lab, due before the beginning of lab. Late assignments will be accepted at 75% credit.

Anatomy Labs:

You are expected to learn all anatomical terms presented in the lab manual and be able to identify those structures on dissected specimens, models, or illustrations (i.e. printouts or complete anatomy images) during each of the lab exams. The majority of time in lab will be spent looking at specimens and models in order to identify these structures. In addition, you WILL be held responsible for any and all information provided in the laboratory text.

Exams:

Three exams will be given over the course of the semester. These exams constitute 80% of your laboratory grade. Each exam consists of **identification questions**, where you must identify the labeled structures on a model, specimen, or illustration. The remaining **practical**

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questions will assess your understanding of the material covered in the laboratory text and supplements. Such information includes function, relative location of structures in the body, and other anatomical concepts. The 3rd exam is cumulative. Any and all information expected on previous exams should be considered applicable for the 3rd exam.

Grades:

Grades are calculated based on points earned. The points are distributed as follows:

Complete Anatomy quizzes (20%)

Post-lab quizzes (10%)

Exams 1 & 2 (22.5% each)

Exam 3 (25%)

Grading scale:

Your total points earned will be applied to a 10 points grade scale. There is no curving in this course, just math. If your score is <0.5% from the next grade level, your score will be rounded up.

	87-90	B+	77-80	C+	67-70	D+	
93-100	A	83-86	B	73-76	C	60-66	D
90-92	A-	80-82	B-	70-72	C-	<60	F

How your exams will be graded:

Lab exams will be graded for accuracy. Anatomy is a very detailed subject, where it is important to know many things precisely. Where you may be accustomed to “good enough” in other courses, on the lab exams you will have to be as specific as possible or you will not receive the points. Most exam questions will be worth a single point, with no opportunities for partial credit. Some examples to wrap your head around this idea...

- Although it is commonly referred to as the “bicep muscle,” its correct name is biceps brachii. Without both words, you have failed to communicate the accurate term.
- If you are asked for the 2nd major branch of the aorta, “carotid artery” is wrong. There are two carotid arteries, the left carotid artery is a branch of the aorta while the right carotid is a branch of another artery.

Honor code: Students are expected to abide by the UNC honor code at all times. Your participation in all activities and assignments implies compliance to the letter and intent of the honor code. Course resources of any kind are not to be made publicly available. Make sure that anything you upload to websites (for example, Quizlet) is not publicly viewable. This policy is to protect copyright of images, and to limit the distribution of information that might assist another student in cheating. It applies to all images, any screenshots you may take, documents, or summaries of any provided resource.

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Attendance Policy:

If you know you will be missing a lab or exam, you must notify your lab TA as soon as possible to reschedule, although rescheduling may not always be possible. If you miss an exam and fail to reschedule it, you will have an oral examination.

Diversity and Inclusion:

The Department of Biology values the perspectives of individuals from all backgrounds reflecting the diversity of our students. We broadly define diversity to include race, gender identity, national origin, ethnicity, religion, social class, age, sexual orientation, political background, and physical and learning ability. We strive to make this classroom and this department an inclusive space for all students.

How to be successful in lab:

Because you will be tested in 2 different ways (identification & practical/application) you should have two strategies for learning the material.

- (1) Identification:** the biggest obstacle for many is the amount of new terminology. Couple that with identifying things you've never seen before, and you've got a challenge. To master the identification of anatomical structures, I suggest 3 things: repetition, variety, and visualization. The more often you see something (**repetition**) and ask yourself to identify it, the better you'll get. If you only look at a single model or a single image of something, you can't understand it. You must look at many sources of information (**variety**). Look at other textbooks, images of dissected cadavers, wikipedia, etc. The variety will fill in the holes in your mental image. Lastly, attempt to **visualize** the structures. Read a description of the deltoid tuberosity, or ask yourself to trace the path of blood through the heart, or attempt to "see" the attachments of the gastrocnemius muscle in that weird guy that sits near you in your chemistry class and wears shorts even in winter. In addition to this strategy, I recommend that students quiz each other to test what you've learned. You have no better self-assessment than to have someone point to a structure and you try to identify it. That's what the exam will look like, so that's the proficiency that you should aim for.
- (2) Practical/function/application:** you will be expected to answer questions about the anatomical structures. The best way to approach learning this material is to take a look at the "learning objectives" provided in each lab manual chapter. If you can do what the objectives indicate, you'll be in good shape. Secondly, for every anatomical structure you attempt to identify, you should ask yourself what it does. There are very few anatomical structures that you need to learn that do not have an associated function or relevance. Actively seek these relationships in your studying.

Most importantly, have a strategy. Learning large quantities of information does not happen by accident. Ask your TA to help you develop a *study-strategy*!

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BIOL 252L Laboratory schedule

Week of...	Lab Topic
Aug 26	Nervous System: Spinal cord, Spinal Nerves
Sep 2	NO LAB
Sep 9	Nervous System: Brain Anatomy & Function
Sep 16	Axial Skeleton
Sep 23	Lab Exam I
Sep 30	Appendicular Skeleton
Oct 7	Muscles of Upper Limb
Oct 14	NO LAB
Oct 21	Muscles of Lower Limb
Oct 28	Lab Exam II
Nov 4	Cardiovascular and Respiratory Systems
Nov 11	Digestive & Urogenital Systems
Nov 18	Lab Exam III