

LEARNING

DEVELOPMENT & SUCCESS

LDS “How To” Series: Studying Anatomy

What is Anatomy?

Anatomy is the study of the structure and function of organs and tissues¹. This includes structures that are large enough to see, and those that require a microscope to be seen. Learning anatomy requires different skills than you may have used in previous classes; you will learn to use visual, spatial, and kinesthetic skills both in your lessons and in your studying². As with all new skills, learning anatomy takes time and practice.

How do I study anatomy?

There are many techniques that you can use to study anatomy. Learning anatomy can take place within an anatomy lab, as well as outside of the lab. Anatomy labs are run by professional anatomists, and learning in a lab involves looking at prepared prosections of cadaveric specimens. It may also involve examining full cadavers. Success within the anatomy lab involves preparation outside of the lab². This may include reading your textbook, looking at simulations, and completing practice questions prior to examining the prosections.

Before attending anatomy lab, it is important to look at your learning outcomes. Determine what exactly you need to know about each system and make a plan that will allow you to meet all the outcomes. Reading around the learning outcomes before you go to the anatomy lab will allow you to make the most of your time in the lab.

What are some strategies for studying anatomy?

1. Use spaced practice³
 - Use multiple learning sessions that are spaced out over time
 - Study early and study often
 - Give yourself adequate time to process each section
 - Repetition across multiple days helps solidify your knowledge
2. Create a word bank^{1,4}
 - Language is an important part of learning anatomy
 - You can create flashcards, a document, or a mind map
 - Make it detailed! Include definitions, examples and other important information
3. Chunk the material
 - Break your learning into manageable sections
 - You can learn anatomy system by system, organ by organ and tissue by tissue
4. Use study aids¹
 - Create or use study aids that combine different modes of learning (visual, auditory, etc.)
5. Connect structure and function⁴
 - The structure of an organ is directly related to its function

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- Make connections between different classes or areas of the system or body
6. Study in groups
- Studying with a group can improve your understanding of anatomy⁴
 - Teach the concepts, test your knowledge and keep each other accountable
7. Test yourself
- Before you have an anatomy test, complete practice questions
 - As much as possible, try to re-create the conditions of the test during your practice (put your notes away, sit in a quiet area, etc.)
 - Practice answering different types of questions (ex. label diagrams, list organ functions, describe specific features of organs)

How do I study for a bell ringer?

Bell ringers are a specific type of anatomy exam where students rotate between stations. At each station, there will be an activity or specimen⁵. These will include questions that ask you to label identified structures, microscope slides, or questions relating to the organ of interest. You will be given a brief amount of time (usually a few minutes) to complete the questions before a bell rings and you must move to the next station. Once you leave the station, you cannot return to it⁵.

Bell ringers are a high-intensity, fast paced test of your anatomy knowledge. To perform well in a bell ringer exam, you must be comfortable with your anatomy knowledge. This includes studying from your lectures, textbook, and in the anatomy lab. If possible, spend extra time in the anatomy lab becoming familiar with the structures, and test yourself in this setting to mimic the conditions of the bell ringer.

During the test, it is important to read the instructions⁵, as they often contain multiple parts. In doing so, you can make sure that you budget your time appropriately. If you are having trouble identifying a specimen, try to identify adjacent structures⁵; these may guide you in your answer. If you have a rest station, you can use this to try and finish incomplete questions. Leave yourself notes in the margin to remind yourself of the question. It is important to remember that unless you are penalized for wrong answers, it is always better to write something than leave a question blank.

1. *How to Study Anatomy in Medical School*. St. Matthew's University. (N.D.). Accessed 17/10/2023. <https://medicine.stmatthews.edu/blog/how-to-study-anatomy-in-medical-school-smusom/>
2. Murphy, B. *5 tips to survive first-year anatomy lessons in medical school*. (August 24, 2022). Accessed 17/10/2023. <https://www.ama-assn.org/medical-students/medical-school-life/5-tips-survive-first-year-anatomy-lessons-medical-school>
3. *Spaced Practice*. Department of Psychology, UC San Diego. (N.D.). Accessed 16/10/2023. <https://psychology.ucsd.edu/undergraduate-program/undergraduate-resources/academic-writing-resources/effective-studying/spaced-practice.html>
4. *Tips for studying Anatomy in Medical School*. Medical University of the Americas. (September 14, 2021). Accessed 16/10/2023. <https://www.mua.edu/resources/blog/how-to-study-anatomy-in-medical-school>
5. *Writing the Bell-Ringer Exam*. Academic Skills, Trent University. (N.D.). Accessed 17/10/2023. <https://www.trentu.ca/academicskills/how-guides/how-study/prepare-and-write-exams/writing-bell-ringer-exam#:~:text=In%20a%20bell%20ringer%20exam,a%20response%2C%20and%20move%20along,=>