

Human Anatomy Laboratory Syllabus

ZOO3731L

Summer 2018

- **Instructor:** Dr. Sian Evans (sevans@fiu.edu)
- **Phone #:** 305-348-3513
- **Office location:** OE 221
- **Office hours:** Monday 10:30AM-12:30PM, Wednesday & Friday 7:40-8:40AM

• **Learning Assistants:** to be announced.

• **When and where do we meet?**

PC – 444

Section U03 – Wednesday 10:15-1:05

Section U04 – Wednesday 1:15-4:05

Section U01 – Friday 10:15-1:05

Section U02 – Friday 1:15-4:05

• **Required Text:**

o Human Anatomy. Martini, Timmons, & Tallitsch, 9th edition o iPhone/Android anatomy apps (e.g. Visual Anatomy, Instant Anatomy, please check with

• **Course Prerequisites/eligibility:**

o General Biology I (BSC 1010) or Foundations of Human Physiology (PCB 2099) or Introductory Microbiology (MCB 2000) or Human Biology (BSC 2033) or Clinical Physiology for Health (HSC 3549)

o Co-requisite: Concurrent enrollment in both lecture and laboratory required. If you have taken lecture and lab previously and did not earn the grade that you wanted for both, I strongly suggest that you take both again at the same time. If you have taken both previously and have passed one of them with the grade you desired, then you only need to retake the course you failed.

• **Attendance:**

➤ Lab attendance is **MANDATORY**. You are expected to attend all of your assigned labs. Missing a lab session means you will miss the pre- and post-quizzes in addition to the class activity, all of which are a major part of your grade. In addition, students who miss even one lab session tend to perform poorly on exams. **Therefore, you must attend lab and participate actively to earn a good grade.** Each week new material is covered and the previous week's material is stored away; therefore, if you miss a session, you will not be able to view the material in the upcoming week.

➤ If there is a legitimate athletic, religious, legal or emergency medical reason for your absence, please contact me (Dr. Evans) for permission to attend another lab section to make-up the lab. I will attempt to schedule you into another lab section that week, depending on space availability. I cannot schedule you for the following week, as new material will be covered. If you know well in advance of your absence, please contact me as soon as possible **before the event** to ensure that a make-up can be scheduled. You may not attend another lab section **WITHOUT** permission. Permission must be sought for each incidence of absence. (This policy does not apply to exams—please see the exam make-up policy below).

• **Lab Material:**

➤ Laboratory anatomical models and related materials must be handled with the utmost care. If a model is broken or damaged, please alert me immediately so that it can be fixed/replaced. Please do not point to structures on the models with your pen or pencil; it damages the models. Pointers will be provided in lab for your use. Also, laboratory material must remain in the lab at all times. Removal of material from the lab will result in an automatic F in the course. No exceptions!

• **Why should you care about Human Anatomy?**

Human anatomy is the **study** of the bones, joints, muscles, and systems of the **human body**. **Human anatomy** focuses on the structures of the **body** and the standard naming and definition of physical properties. Elements include the nervous system, cardiovascular system, gastrointestinal system, musculoskeletal system, and more.

I was an undergraduate in 1975 when controversial ideas about health and biology (and behavior) were debated in some of my college biology classes. It was an exciting time to study evolutionary biology and I continue to enjoy the challenge of considering the effects of human evolutionary change in explaining modern humans.

In this summer course, we will examine humans as unique animals shaped by evolution as hairless bipeds adapted for distance running and hunting. Hands that were no longer used in movement were free to craft tools (technology) and cook a high-quality diet that resulted in an increase in brain size. Our anatomy tells the story of our evolutionary success, and we will follow these unique human changes when we discuss the structures and systems of our bodies.

• **How will this course help you succeed?**

This course will help you acquire a conceptual and practical framework that you can apply to solve complex challenges in your future careers, whether in research, academia or in the clinical field. By the end of this course, you will be able to:

- Recognize anatomical structures and explain the physiological functions of body systems.
- Use anatomical knowledge to predict physiological consequences, and use knowledge of function to predict the features of anatomical structures.

- Synthesize ideas to make connections between anatomy and physiology and real-world situations, including healthy lifestyle decisions and homeostatic imbalances.
- Develop a vocabulary of appropriate terminology to effectively communicate anatomy-related information to future coworkers.
- Where can you look for important information?

- **Where can you look for important information?**

- **Anywhere you want!** “Real” health field professionals use handbooks, textbooks, online resources, and peer-reviewed articles to learn what they need to know to answer complex questions.
- **Group work.** Studying with a partner or group may be very helpful! If you have a problem finding someone, please let me know in the beginning of the course, and we will group you with someone. You will also work in a group environment inside the laboratory. These groups are formed of 6 students each. These groups won’t be decided until a week before lab starts. You will go to Canvas and create your own groups.

- **How will you succeed in this course?**

- **Participate.** You are expected to participate actively in the course based on your own learning goals. Since you all come from different backgrounds and science experiences, your peers are valuable resources for learning. Don’t shortchange them and yourself by coming to lab without preparing or by sitting quietly during class discussion. Remember: **“The one that does the work, does the learning!”**
- **Review Lab terminology list BEFORE coming to lab.** Each lab has its own terminology list. This list is posted on Canvas. Together with the list of terms, there will be pictures of the models that we use. In addition, there are video recordings of these models together with the terms that you should be familiar with. You are responsible for studying at least the first station where you will be starting lab each week. In other words, you have to be an expert in that station. So make sure to study the terminology list and watch ALL video recordings for your specific station. You may use the videos to help you label the pictures that are provided. Avoiding this task will result in poor performance during the lab and thus poor exam and course performance. Trust me; I see this happen every semester!
- **Communicate.** This course may be unlike any of your previous courses, with new challenges. You should let me know what ideas and tools are challenging to you and how you are doing in the course. If you start this habit early in the semester, then I will be able to better tailor our activities to help you learn. If you are unable to meet with me during office hours please try to schedule a different time that is more convenient for you.
- **Take risks & Be Open-minded.** “Sometimes we learn from our mistakes”. In this course I want every one of you to actively participate in all of our activities. Don’t think that you have to always have the correct answer to be able to participate. Nobel Prize breakthroughs have often resulted from attempting to support a “best guess” with incomplete data or from finding evidence

to explain an “experiment gone wrong”. So, go for it and don’t worry that anyone will be judging you!

• **How will we evaluate your progress?**

➤ **Major assessments (50%):** There are two major assessments, a mid-term and a final exam. Each exam will be worth 25% of your grade. Labs 1-3 will be covered on the mid-term and labs 4-6 will be covered on the final exam. These exams will be done on iPads provided by me. Structures will be tagged throughout the lab, and you will have to identify them and write them on a fill-in-the-blank format exam on blackboard.

➤ **Pre- and Post-quizzes (40%):** Every lab will have a pre- and a post-quiz. Both quizzes will be done on Canvas. The pre-quiz will be taken after you have gotten together with your first group to discuss the terms that you have to be an expert on. This quiz will have a “fill-in-the-blank” format. So make sure you know how to spell the terms. There will be 5 questions. The post-quiz will be done at the end of the lab rotation. On this quiz you will be tested on every structure that you learned that day. This quiz will have a “multiple choice question” format. There will be 12 questions. Each quiz will be worth 20% of your grade.

➤ **In-class activities (10%):** After the post-quiz, there will be a class activity during every lab session. These activities will be determined when you are in class and will be group oriented. You will have to combine concepts that you learned in lecture to be able to perform those activities. Which reminds me, you should always make sure you bring what you learned in lecture to lab, and in lab to lecture. This will guarantee your success in the course. Lab sessions do last most of the allotted time (2 hours and 50 minutes), so make sure not to schedule any event that will conflict with your lab time.

• **Grade Scale:**

A	B+	B	C+	C	D	F
90-100	85-89	80-84	75-79	70-74	60-69	<59

• **Use of Electronic Devices:**

➤ The only electronic device that you will be able to use is the iPad that will be provided to you at the beginning of every lab. Make sure to check it out with the LAs at the beginning of every class and return them at the end. The purchase of the iPads didn’t come easy. You should feel privileged that you are using iPads in the lab. They were purchased after lots of negotiations and a lot of hard work on my part, so make sure you use them wisely. Just to make you aware, this lab is secured with an alarm and the iPads do have a tracking device, so please make sure you return them before you leave. You definitely don’t want to dirty your name because of an iPad. Just study really hard, so you can graduate, get a great job and you will be able to buy as many iPads as you would like.

➤ All cell phones must be silenced during lab. If you must make/take a call or send a text, please step out of the classroom. Checking email and surfing the web are not allowed during lab time.

• Professional and Academic Integrity

- Eating and drinking are not permitted in lab. You are welcome to leave the classroom for snack/drink breaks. Each time you are caught eating or drinking inside of the lab you will not get your grade for the in-class activity. This includes drinking water.
- Before you rotate to a different station, please make sure that all models are put back together with the associated pieces in place for the next group.

Exam Policies:

1. Prompt attendance at specified exam times is required. Students will not be admitted after the exam has started. We do start the exam on time, ALWAYS.
2. Except under exceptional circumstances, students should not leave the exam room any time during the exam. Attend to personal needs before being seated.
3. All personal items must be stored in your specific cubby. :
 - Remove hats, caps, and all headwear. Headwear of a religious nature is permitted.
4. Nothing with an on/off switch (computers, tablets, cell phones, iWatch, etc.) is permissible on your person. EXCEPT the iPads that we provide you with.
5. You must have a photo ID and present this ID to the proctors when turning in your iPad.
6. Every structure that is tagged is going to be whatever is at the tip of the arrow.
7. Students should not disrupt the exam environment in any manner including but not limited to talking, and making unnecessary noises. In general, silence should be observed during the exam period.
8. The faculty proctor will initiate an academic misconduct investigation, for all involved students who violate Exam Policies.

Missed Examination Policy: Unless there is a legitimate athletic, religious, legal or **emergency** medical reason for your absence, there will be no opportunity to take examinations at any time other than the designated exam period. For events other than emergencies, contact the instructor well in advance of the exam period. For this course, “Emergency” is defined as an unpreventable event that impedes your attendance.

Emergency situations are:

1. Medical emergency with Medical Doctor’s note/emergency room.
2. Automobile accident with police report (lack of ride is NOT an emergency case).
3. Death of immediate family members.

You will only be allowed to make up an exam if an email is sent to me (Dr. Evans) within **24 hours** of the emergency. This should be followed by the proper documentation. Emergency also covers natural events such as hurricanes, floods, or fires that cause the closure of FIU. **Please note that the lab will be closed for the whole week if one of the week’s lab sections is**

closed/affected. I will do my best to inform you in advance via email. But it is your responsibility to find out the status of emergency.

Student Disability: Any student who, because of a disability, may require special arrangements in order to meet course requirements should contact DRC (Disability Resource Center) within 1 week of the beginning of this course to make the necessary accommodations.

Sexual Harassment Policy: The Faculty Senate voted to require each professor to include a statement about this in the syllabus. FIU's sexual harassment policy is available online: http://www.fiu.edu/hr/eop/Forms/Policies/Sexual_harassment.pdf

Academic Dishonesty Policy: **Cheating or plagiarism will not be tolerated!!!** Cheating (e.g., looking at another student's exam or station, possession of notes, talking, **working ahead to other stations during the practical exam**) during any of the administered exams is a direct violation of FIU's student conduct code. Any student caught cheating will be given a score of zero on the assignment/examination, no exceptions, and will also result in university administrative action. Anatomical knowledge is an amazing asset, and we hope you will discover that learning this information is extremely important and rewarding.

Tips for succeeding in the course: YOU CANNOT CRAM FOR ANATOMY! Cramming just prior to the exam is one of the most common causes for performing poorly in this course. While some material is rote memorization, much of this course involves integrating complex functions and spatial relationships among structures that cannot be retained without sufficient and consistent studying throughout the semester. Give ample time to reading and studying anatomy **each day**, even if some days you only have a few minutes between classes. It's all about repetition! Make flashcards. Draw structures and practice labeling them from memory. Draw schematic diagrams of nerves and their branches. Create tables of muscles and their functions. These techniques will help you learn anatomy much more than all-nighters!

*****Please be advised that the content of this syllabus is subject to change. Good luck, and have a wonderful semester!**

Calendar of Class Activities

Lab Schedule:

No Lab	May 9-11	
Lab 1	May 16-18	Chapter 4 – Integumentary System Chapter 6 - Skeletal System (Axial Division) Chapter 7 - Skeletal System (Appendicular Division)
Lab 2	May 23-25	Chapter 7 – Skeletal System (Appendicular Division) Chapter 10 - Muscular System (Axial Division) Chapter 11 – Muscular System (Appendicular Division)
Lab 3	May 30-June 1	Chapter 11 - Muscular System (Appendicular Division)
Lab Review	June 6-8	You will be able to review all of the material covered previously
Midterm	June 13-15	Labs 1, 2, 3
Lab 4	June 20-22	Chapter 13 – Neural Tissue Chapter 14 - Nervous System (Spinal Cord and Spinal Nerves) Chapter 16 – Brain and Cranial Nerves
Lab 5	June 27-29	Chapter 18 – Special Senses Chapter 21: Cardiovascular System (Heart) Chapter 22: Cardiovascular System (Vessels)
July 4-6		No Lab
Lab 6	July 11-13	Chapter 24: Respiratory System Chapter 25: Digestive System Chapter 26: Urinary System Chapter 27: Reproductive System
Lab Review	July 18-20	You will be able to review all of the material covered previously
Lab Final	July 25-27	Labs 4, 5, 6