Applied Human Anatomy w/Lab (UF Online/PACE)

APK2100c | 4 Credits | Fall 2023



Connect with HHP



@UFHHP @ufhhp

@UF_HHP

APK LinkedIn

Course Info

Joslyn Ahlgren, PhD **INSTRUCTOR**

*Study tips and a personal note from Doc. A are on the last 2 pages.

Office: FLG 108

Office Phone: 352-294-1728 Email: jahlgren@ufl.edu

Preferred Method of Contact: Canvas email if you are a current student

Virtual office hours are held weekly. A schedule, tips for how to best use **OFFICE HOURS**

office hours, and zoom info for office hours will be posted in CANVAS.

MEETING TIME &

LOCATION

This is a fully online course. All lectures and lab activities are online through

the Canvas course management system (https://elearning.ufl.edu/).

COURSE DESCRIPTION

Study of general anatomy of the human body from a systematic approach. Understanding anatomical terminology, gross structures, and locations of different body structures are primary concerns. Cells, tissues, and organs of the integumentary, skeletal, muscular, nervous, circulatory, respiratory, digestive, urinary and reproductive systems are emphasized.

PREREQUISITE KNOWLEDGE AND SKILLS

There are no prerequisites for this course; however, any previous experiences in medical terminology, physiology, physics, chemistry, and/or biology will be helpful to students.

COURSE FORMAT

Lecture - Students will watch pre-recorded lectures and complete weekly homework questions in Mastering A&P. Students should read from the textbook prior to watching the lectures. The midterm lecture exams and final exam (which will utilize HonorLock proctoring) are based on lecture content the learning objectives for each chapter.

Lab - The first half of the lab will consist of pre-recorded lectures of gross anatomical structures of the skeleton and muscles. These are identification-only lab and there will be one lab exam for the bones and another for the muscles. In the second half of the lab, students will choose to continue with fully online, virtual labs that are like those completed for bones and muscles...OR they can complete a 5-part dissection. Each part of the dissection will be due at different times throughout the second half of the semester and will require students to dissect a specimen, take images of their work, and submit labeled images of their dissections. Detailed dissection instructions, videos, and grading rubrics will be available for students in CANVAS.

REQUIRED AND RECOMMENDED MATERIALS

You will need the following materials for class:

• **TEXTBOOK and MASTERING A&P ACCESS:** Please note that this course will be participating in the UF All Access program this semester. Students will have two options to gain access to the required textbook and Mastering A&P materials when classes begin. Students will have a choice to "Opt-In" to Mastering A&P access through a link provided in CANVAS for a reduced price and pay for these materials through their student account. Students who do not choose this option will be able to purchase a standalone code through the UF Bookstore. Both options provide access to the same online materials.

Textbook: Human Anatomy by Marieb, Wilhelm, Mallatt, 9th edition. Pearson. ISBN: 978-0135168059

- **DISSECTION KIT:** This is an optional component of the course. This dissection kit will provide you with a fetal pig, a sheep heart and brain, a cow eyeball, and all dissection tools needed. This semester, UF will cover the cost of this dissection kit for all students in this class! Within the first few weeks of class, you will be provided with specific instructions on how to receive your kit. If you opt into the dissection lab, you'll also need the following:
 - PUSH PINS/DISSECTION PINS: You can get these on Amazon quickly and for around \$5. They usually
 come in a plastic container and I recommend getting the pins with the t-shape rather than the colored,
 rounded tips...they are much easier to use. Also, I recommend 2-inch pins...longer is better than shorter.
 These are entirely optional, but do come in handy.
 - TRASH BAGS OR PLASTIC TABLECLOTH: I use a 13-gallon trash bag to cover my table each time I do a
 part of this dissection and I recommend you do the same. Trash bags are nice because they are doublelayers and a perfect size, not too large, but large enough that you won't feel too scrunched for space.
 - o **GALLON-SIZED ZIP-CLOSURE BAGS:** Your kit will come with an extra plastic bag (maybe even two), but having an extra bag on-hand can't hurt.
 - MORE GLOVES: You will want to have at least 1-2 pair of gloves for each part of the dissection. And you
 never know when a glove will get torn, so extras are a plus. You can buy these online or at your local
 pharmacy store. Make sure that if you have a latex allergy, you purchase nitrile gloves.
 - o **DIGITAL CAMERA**: You'll be taking pictures of your work, so make sure that you have a camera. Your cell phone camera should be fine for this.
 - o **PAPER TOWELS**: Sometimes the preservative liquid dribbles all over your work space and you'll want to wipe it up for neatness and for better pictures.

COURSE LEARNING OBJECTIVES:

Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences. Courses focus on major scientific developments and their impacts on society, science and

the environment, and the relevant processes that govern biological systems. Students will formulate empirically-testable hypotheses derived from the study of living things, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

The purpose of **this** course is to introduce students to the body's structures and present information and engage students in a way that promotes critical and creative thinking within the context of health and movement studies. Students will identify important structures of the human body AND incorporate functions of the structures and tissues. This applied method of teaching anatomy is intended to enhance the long-term retention of the concepts covered and prepare students for future courses and experiences which may require health or movement-based communication and problem solving.

By the end of this course, students should be able to...

| UF Gen Ed Student Learning | APK 2100c Student Learning | How will these SLOs be |
|--|---|------------------------|
| Objectives | Objectives | assessed? |
| Demonstrate competence in the | Identify and describe gross and | Homework problems |
| terminology, concepts, | microscopic structures of the organ | |
| methodologies, and theories used | systems covered. | Lecture exams |
| within the discipline. | | |
| | Describe the relationship between | Lab exams |
| | structure and function at all levels of | |
| | organization (cellular, tissue, organ, | |
| | system, organism). | |
| Communicate knowledge, ideas, and | Communicate with peers and | Lecture exams |
| reasoning clearly and effectively in | professionals using anatomical | |
| written or oral forms appropriate to | terminology. | Dissection labs |
| the discipline. | | |
| Analyze information carefully and | Predict functions of unknown body | Homework problems |
| logically from multiple perspectives, | structures if given the anatomical | |
| using discipline specific methods, and | make-up or vice-versa (predict | Lecture exams |
| develop reasoned solutions to | anatomical make-up of body | |
| problems. | structures if given clues about | |
| | function). | |
| | | |
| | Predict potential causes of | |
| | disease/injury symptoms from a | |
| | functional anatomy perspective. | |

Course & University Policies

ATTENDANCE & PARTICIPATION POLICY

Because this is an entirely online course, you are not expected to physically be on UF's campus at any time. However, you most certainly ARE expected to participate in and complete all graded components of the course, including engagement activities worth 5% of your grade.

PERSONAL CONDUCT POLICY

Students should aim to exhibit behaviors that reflect highly upon themselves and our University:

- Read and refer to the syllabus
- Submit assignments on time
- Use of professional, courteous standards for all emails and discussions

- Engage respectfully with others in discussions, emails, and virtual meeting spaces
- Adherence to the UF Student Honor Code: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/
 - Use, access, or handling of resources or technology during an exam will result in both academic and educational sanctions. This *typically* results in a zero on the exam where cheating occurred.
 - All allegations, regardless of the severity, will be reported to the Dean of Students Office for Universitylevel documentation, investigation, and processing

EXAM MAKE-UP POLICY

Step 1: Get documentation of your illness or emergency. A student experiencing an illness should visit the UF Student Health Care Center or their preferred healthcare provider to seek medical advice and obtain documentation. If you have an emergency (including but not limited to, a new medical diagnosis or death of a loved one), please contact the Dean of Students Office (www.dso.ufl.edu) and follow the DSO Care Team procedures for documentation and assistance (https://care.dso.ufl.edu/instructor-notifications/).

Step 2: Fill out the make-up request form posted in CANVAS (success resources module) and submit it to your course instructor via CANVAS email. Make-ups will not be granted for personal travel/vacations. Additionally, many students will encounter having multiple exams in one day.

Should a student miss an exam due to an unexcused reason (e.g., overslept, mixed up the exam time, etc.), the exam can be taken with a 20% penalty if taken within 24 hours of the original exam time or with a 40% penalty if taken within 48 hours of the original time. Please email the instructor immediately should this need to be arranged.

Requirements for class attendance and make-ups, assignments, and other work are consistent with the university policies that can be found at https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

ACCOMMODATING STUDENTS WITH DISABILITIES

Your instructor is committed to creating a course that is inclusive in its design. If you encounter barriers, please let your instructor know immediately so they can determine if there is a design adjustment that can be made or if an accommodation might be needed. You are also welcome to contact the Disability Resource Center's Getting Started page at https://disability.ufl.edu/students/get-started/ to begin this conversation or to establish accommodations for this or other courses. Your instructor welcomes feedback that will assist in improving the usability and experience for all students.

Students who are already registered with UF's DRC should share their accommodation letter with the course instructor and discuss their access needs as early as possible in the semester. It is imperative that you verify your specific access needs with your course instructor at least 48 hours PRIOR to scheduled assessments.

COURSE EVALUATIONS

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Getting Help

HEALTH & WELLNESS

U Matter, We Care: If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575

- Counseling and Wellness Center: https://counseling.ufl.edu/, 352-392-1575
- Sexual Assault Recovery Services (SARS) Student Health Care Center, 392-1161
- University Police Department, 392-1111 (or 9-1-1 for emergencies) http://www.police.ufl.edu/

ACADEMIC RESOURCES

- E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml
- Career Connections Center, Reitz Union, 392-1601. Career assistance and counseling. https://career.ufl.edu/
- Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
- Student Complaints On-Campus: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/
 On-Line Students Complaints: http://distance.ufl.edu/student-complaint-process/

Grading

COURSE COMPONENTS & CALCULATING YOUR GRADE

The following table outlines the point-accruing components of this course. Any changes to this due to mid-semester interruptions will be posted as an announcement in CANVAS.

| Course Components | % of Total Grade |
|---|------------------|
| Syllabus quiz – mandatory, but not graded | 0% |
| Lecture Exams | 35% |
| Homework | 20% |
| Lab | 40% |
| Engagement | 5% |
| Extra Credit – Mastery Quizzes | 0% |

Syllabus Quiz – Students must earn 100% on the syllabus quiz in CANVAS in order to unlock the remainder of the course, including lecture slides for note-taking, lecture videos, homework, and labs.

Lecture Exams – Each lecture exam will consist of 40 questions. Question formats will include multiple choice, true/false, and matching. Exams will be proctored by Honor Lock (instructions will be posted in CANVAS). Exams will be open for 24 hours—students must complete the exam within that time frame. Students are not permitted access to any kind of materials or notes during these exams. Students will, however, be allowed use of a white board/dry erase marker for lecture exams only (not lab exams). The white board must be blank at the start and end of the exam and shown to the camera. Exam questions are generated by the course instructor and the majority of focus should be given to the lecture notes and chapter learning objectives when studying. These exams are intended to test your depth of knowledge for the given chapters — details are important.

Homework – Homework is due each week on Fridays at 11:59pm. Homework problems are multiple choice, true/false, fill in the blank, and matching. These questions are specific to the textbook, so that should be your primary resource for answering those questions. These assignments are NOT intended to be used as the primary study tool for preparing for the exams. The function of the homework assignments is to (a) get students more familiar with the textbook, and (b) to get students eased into answering anatomy questions. Specific homework grading guidelines are posted in CANVAS.

The following are specific homework grading guidelines to keep in mind:

- You may open/close an assignment as many times as you wish until it is due.
- For the fill in the blank questions, spelling and proper tense of the word matters.
- For multiple choice and fill-in-the-blank questions, you are penalized 50% if you miss on the first attempt and 100% if you miss on the second attempt.
- For true/false questions, you are penalized 100% if you miss on the first attempt.
- You are penalized a small fraction for opening a hint if one is available.
- Late submissions will be penalized 25% per day.

Lab — All students will complete virtual labs 1-2 (the skeleton) and 3-4 (muscles of the body, including some origins/insertions/actions). These virtual labs consist of short videos to help you identify the testable structures and interactive drag-and-drop activities to help solidify your understanding. Each of those labs will culminate in a lab exam: Lab Exam 1 (the skeleton) and Lab Exam 2 (muscles and OIAs). Following those labs/lab exams, student can choose whether to continue with virtual labs identical in nature to those for bones and muscles (two more lab exams) OR complete a dissection project.

<u>Lab Exams</u> will be proctored by HonorLock. Exams will be open for 24 hours—students must complete the exam within that time frame. Once you begin the exam, you will be given 40 minutes to complete the exam. The Lab exams will be 40 multiple choice questions, so you must think quickly during these lab exams. These questions will consist of an image with a structure labeled. You must select the correct name for the structure labeled in the image. Some of the images will be from plastic models, others may be x-rays or cadavers. Success on these exams will be directly dependent upon your familiarity with the structures you are required to know for each exam. In other words: practice, practice, practice! Practice questions will be provided.

<u>Dissections</u> are optional in this course and will replace lab exams 3 and 4 should a student opt for this. This project is divided into an introduction and five parts: pig joints and muscles, sheep brain and pig nerves, sheep heart and pig heart and vessels, pig lungs and respiratory structures, and pig digestive and urinary structures. For each section, you will perform a dissection activity using the contents of your dissection kit, take images of your dissections, and generate a power point document of your images. You will identify a list of structures on your images and label them. When complete you will save your document as a PDF file and upload it to CANVAS by the due date listed in the course schedule below. These are time-consuming labs and should not be procrastinated. Detailed instructions, instructor-led dissection videos, and examples from past semesters will be provided.

Engagement – For optimal learning (and fun), students should engage with one another and with the course instructor. Students are free to choose their own method(s) of engagement from the list below. Students may also propose alternate ideas to the course instructor and points can be negotiated for those ideas if accepted. A detailed rubric for earning these points is posted in CANVAS and can be accessed from the home page.

- General Discussion board post
- Sharing is Caring discussion board post
- Isn't that Cool?! discussion board post
- GroupMe activity
- Virtual Office Hours participation
- Meeting with Instructor
- Group Study Sessions

Extra Credit Mastery Quizzes — In place of a comprehensive final, students can complete four mastery quizzes — one for each lecture exam. Students have two attempts to score up to 5 points on each of these quizzes. Points earned on these quizzes will be added to their respective lecture exam. For example, if 4.5 points are earned on Mastery Quiz 1, then 4.5 points would be manually added to Lecture Exam 1. These quizzes can be completed at any time during the term as long as they are done before Wednesday of finals week. Points will be added to lecture exams at the end of the term.

GRADING SCALE

Any discrepancies with the gradebook should be pointed out to the instructor immediately. There is no curve for this course and final grades will not be rounded up. More detailed information regarding current UF grading policies can be found here: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/. It is entirely inappropriate to ask your instructor for individualized exceptions to this grading scale. Any such requests will be respectfully ignored.

Minus grades are not assigned for this course. A minimum grade of C is required for all General Education courses, such as this one. The <u>percentages</u> in the table below will be used to calculate grades (i.e., 90% = A).

| Letter | Percent of Total Points Associated | GPA Impact of Each |
|--------|------------------------------------|---------------------------|
| Grade | with Each Letter Grade | Letter Grade |
| Α | 90.00-100% | 4.0 |
| B+ | 87.00-89.99% | 3.33 |
| В | 80.00-86.99% | 3.0 |
| C+ | 77.00-79.99% | 2.33 |
| С | 70.00-76.99% | 2.0 |
| D+ | 67.00-69.99% | 1.33 |
| D | 60.00-66.99% | 1.0 |
| E | 0-59.99% | 0 |

Weekly Course Schedule

The following table represents current plans for the term. Any changes to this plan will be posted in CANVAS as an announcement.

Watch the instructor welcome, read the syllabus, and take the syllabus quiz on day 1. Earning a 100% on the syllabus quiz will give you access to all course contents (lecture and lab slides, sample test questions, etc.).

Homework for each chapter is due every Friday at 11:59pm EST. You must register for MasteringA&P (instructions posted in CANVAS) to access the homework.

Dissections are due at 11:59pm EST the Sunday following assignment in the table below.

Specific pages to read from the textbook are posted in CANVAS for each chapter.

| Week | Dates | Lecture Schedule | Lab Schedule |
|------|-------------------|--|---|
| 1 | Aug 21- Aug 25 | Classes begin on Wed, August 24 Ch.1 – Intro to the Body Ch. 2 – Cells | Lab 1 - Axial Skeleton |
| 2 | Aug 28- Sep 01 | Ch. 4 – Tissues | Lab 2 - Appendicular Skeleton |
| 3 | Sep 04- Sep 08 | Mon. Sep 04 – Holiday - no office hours today Ch. 5 – Integumentary | Lab 2 - Appendicular Skeleton cont. |
| 4 | Sep 11- Sep 15 | Lecture Exam 1 – Wed, Sep 13, 12am-11:59pm Ch. 6 – Skeletal | Lab Exam 1: Fri. Sep 15, 12am- 11:59pm EST |
| 5 | Sep 18- Sep 22 | Ch. 9 – Articulations Ch. 10 – Muscular | Lab 3 – Muscles of Axial Skeleton |
| 6 | Sep 25- Sep 29 | Ch. 10 – Muscular continued Ch. 11 – Muscles | Lab 4 – Muscles of Upper Limb |
| 7 | Oct 02- Oct 06 | Ch. 11 – Muscles continued Lecture Exam 2 – Wed. Oct 04, 12am-11:59pm Fri. Oct 06 – Homecoming | Lab 5 – Muscles of Lower Limb |
| 8 | Oct 09- Oct 13 | Ch. 12 – Intro to Nervous Ch. 13 – CNS | Lab Exam 2: Mon. Oct 06, 12am- 11:59pm EST Lab 5 (skin/eyes/ears/joints) OR Dissection Intro |
| 9 | Oct 16- Oct 20 | Ch. 13 – CNS continued Ch. 14 – PNS | Labs 6 (nervous) OR Dissection Part 1 (muscles/joints) |
| 10 | Oct 23- Oct 27 | Ch. 15 – ANS Lecture Exam 3 – Fri. Oct 28, 12am-11:59pm | Lab 7 (respiratory) OR Dissection Part 2 (nervous) |
| 11 | Oct 30- Nov 03 | Ch. 19 – Heart (562-574, 577-580) Ch. 20 – Vessels | Lab Exam 3: Mon. Oct 30, 12am- 11:59pm EST OR Dissection Part 3 (cardiovascular) |
| 12 | Nov 6- Nov 10 | Ch. 20 – Vessels cont. Ch. 22 – Respiratory Fri. Nov 10 – Holiday – no office hours today | Lab 8 (respiratory) OR Dissection Part 4 (respiratory) |

| 13 | Nov 13- Nov 17 | Ch. 22 – Respiratory cont. Ch. 23 - Digestive | Lab 9 (digestive) OR Dissection Part 5 (digestive) | |
|---|-------------------|---|--|--|
| 14 | Nov 20- Nov 24 | Ch. 23 – Digestive cont. Wed-Fri - Holiday – No Lecture/Lab/Office Hours | Holiday, no labs, enjoy your break! | |
| 15 | Nov 27- Dec 01 | Ch. 24 - Urinary (720-736) Lecture Exam 4 - Fri. Dec 01, 12am-11:59pm | Lab 10 (urinary/repro) OR Dissection Part 5 (urinary/repro) | |
| 16 | Dec 04- Dec 08 | Ch. 25 – Repro (no required reading) Thur-Fri, Dec 07-08 – Reading Days | Lab Exam 4: Wed. Dec 06, 12am- 11:59pm EST | |
| Mastery Quizzes Completed by Wed Dec 13 11:59nm FST | | | | |

iviastery Quizzes Completed by Wed, Dec 13, 11:59pm EST

SUCCESS AND STUDY TIPS

These tips have been provided by both your course instructor as well as students who've been successful in the course.

STUDY TIPS:

- Read from the text BEFORE watching the lectures. Do not take notes, underline, highlight, or attempt to memorize anything...JUST READ and enjoy!
- **Snowball your notes.** Begin studying lecture material immediately after the first day. Then, after the second lecture, begin your studies with day one notes. Continue this all the way up to the exam.
- Study from lectures notes...not the text. If there is something in the textbook that was NOT covered in lectures, you are not expected to know it. There is a lot in the text that we don't have time to cover.
- **Google novel images.** For example, if there is a picture of the brainstem in your lecture notes, Google "brainstem images" and see if you can identify the structures from the lecture on a different image.
- **Google diseases.** For example, if we are studying bone tissue, Google "bone disease." Click on any link and just read a paragraph to see if you can understand based on what you now know about bone tissue anatomy. If you don't understand it, that's okay...did you recognize any words?
- **Study with others!** This does not mean review ppt slides together...you can do that on your own. When you study with others, do something more productive, like working on the sample test questions, googling things to discuss, or even creating practice exam questions for yourselves. This is totally doable via zoom.
- Study from the Learning Objectives for each chapter. It is highly recommended that as you study (especially with others), you follow along with the learning objectives for each chapter. Many students share google docs and split up the work to make comprehensive study guides.

SUCCESS TIPS:

- Stay on top of your schedule. This course moves at a FAST pace...and you can easily get overwhelmed if you procrastinate. Complete the homework as you go and study for the exam on a daily basis.
- **Stay organized.** Keep track of all important due dates and move through each day in a uniform manner so that you are always aware of what you have done and what is left to be completed.
- **Utilize the instructor (Doc. A).** If you have questions or concerns, please reach out for assistance. Waiting until the last minute is not recommended as it limits the ability of your instructor to help you.
- Set up canvas notifications so that you receive and read all class announcements.
- Avoid Smokin' Notes...seriously...don't get me started on how bad these are for *LEARNING*. Take your own notes...swap notes with friends in class for comparison...but for goodness sake, don't spend extra money on notes for this class.
- Have a positive attitude! THIS STUFF IS COOL!

PERSONAL NOTE FROM DOC. A

Anatomy is all about the human body. That includes things like skin/hair/eye color/genital differences and similarities from one individual to the next. I am committed to using this course content to help students become comfortable, competent, and caring when discussing issues related to the body and dismantling systems which inherently disadvantage some bodies. These attributes can help us all advocate for ourselves and others. If you have ideas for me along these lines or feel uncomfortable at any point, please reach out to me—I'd love to hear your perspectives and have a conversation. Also, it is important to me that you feel welcome and safe in this class; and that you are comfortable communicating with me, your TA, and your classmates. If your preferred name is not what shows on the official UF roll, please let me know—I can show you how to change it. I would like to acknowledge the name and pronouns that reflect your identity.

Welcome to Anatomy...it's going to be a great semester!