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

APK2100c | 4 Credits | Summer C 2023



**Connect with HHP** 



@UFHHP @ufhhp @UF\_HHP



APK LinkedIn

### **Course Info**

INSTRUCTOR Joslyn Ahlgren, PhD

\*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

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

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 (<a href="https://elearning.ufl.edu/">https://elearning.ufl.edu/</a>).

#### **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.

# **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 a required 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.
- **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 double-layers and a perfect size, not too large, but large enough that you won't feel too scrunched for space.
- **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.
- **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.
- **PAPER TOWELS**: Sometimes the preservative liquid dribbles all over your workspace and you'll want to wipe it up for neatness and for better pictures.

#### **COURSE FORMAT**

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. The first half of the lab will consist of pre-recorded lectures of gross anatomical structures of the skeleton and muscles.

There will be two lab exams where students will identify images of gross anatomical structures. The second half of lab will consist of a dissection project. 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.

#### **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 1 and 2
	structure and function at all levels of	
	organization (cellular, tissue, organ,	
	system, organism).	
Communicate knowledge, ideas, and	Communicate with peers and	Communication assessment
reasoning clearly and effectively in	professionals using anatomical	
written or oral forms appropriate to	terminology.	
the discipline.		
Analyze information carefully and	Predict functions of unknown body	Homework problems
logically from multiple perspectives,	structures if given the anatomical	Tromework problems
using discipline specific methods, and	make-up or vice-versa (predict	Lecture exams
	•	Lecture exams
develop reasoned solutions to	anatomical make-up of body	Lab E and
problems.	structures if given clues about	Lab Exam 1
	function).	
	Predict potential causes of	
	disease/injury symptoms from a	
	functional anatomy perspective.	

# **Course & University Policies**

# **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 the dissections, homework assignments, **engagement activities**, and exams.

#### **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: <a href="https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/">https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/</a>
  - 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.
  - o All allegations, regardless of the severity, will be reported to the Dean of Students Office for University-level documentation, investigation, and processing

#### **EXAM MAKE-UP POLICY**

Students who are unable to complete an exam or assignment on time due to illness or emergency should notify their instructor as soon as possible. Documentation will be required for consideration of a make-up request. Students may provide documentation directly to the course instructor or contact the Dean of Students Office (<a href="www.dso.ufl.edu">www.dso.ufl.edu</a>) and follow the DSO Care Team procedures for documentation and submission of a request for make-up assignment

(<a href="https://care.dso.ufl.edu/instructor-notifications/">https://care.dso.ufl.edu/instructor-notifications/</a>). Please note: your course instructor has the right to deny a request for a make-up.

#### Please follow the instructions in CANVAS for submitting a make-up request.

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.

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

#### **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 <a href="https://disability.ufl.edu/students/get-started/">https://disability.ufl.edu/students/get-started/</a> 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 <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. 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 <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

## **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) <a href="http://www.police.ufl.edu/">http://www.police.ufl.edu/</a>

#### **ACADEMIC RESOURCES**

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

#### INCLUSION, DIVERSITY, EQUITY, AND ACCESSIBILITY RESOURCES

For suggestions or concerns related to IDEA, please reach out to any of the following:

- Dr. Ashley Smuder, HHP IDEA Liaison, asmuder@ufl.edu
- Dr. Rachael Seidler, APK Graduate Coordinator, rachaelseidler@ufl.edu
- Dr. Joslyn Ahlgren, APK Undergraduate Coordinator, jahlgren@ufl.edu

# **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 (number of each)	% of Total Grade	
Syllabus quiz – mandatory, not graded	0%	
Lecture Exams (4)	35%	
Homework (20)	20%	
Lab Exams (2)	20%	
Dissection Project (6 parts)	20%	
Engagement (variable)	5%	

*Syllabus Quiz* – Students must earn 100% on the syllabus quiz in CANVAS before access to the rest of the course modules is permitted.

Lecture Exams – Each lecture exam will consist of 35-40 questions. Questions will be multiple choice, true/false, and matching. Exams will be proctored by HonorLock (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 Saturday 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.
- Late submissions will be penalized 25% per day.

Lab Exams – Your laboratory experiences for this course will be in two parts: Part 1: two lab exams; Part 2: a dissection project. The first lab exam will cover all bones of the body and important bone markings. The second lab exam will

cover all major muscles of the body as well as origins, insertions, and actions of specified muscles. The dissection project will cover the other organ systems and there is not an exam for that.

Lab Exams will be proctored by HonorLock. Exams will be open for 3 days—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,

Dissection Project — A dissection kit is required for this course. 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. Each assignment will be due on Sundays at 11:59pm.

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. All engagement points must be completed by Aug 4<sup>th</sup> at 11:59pm.

- Discussion board activity
- GroupMe activity
- Virtual Office Hours participation
- Scheduling an exam review
- Sharing is Caring discussion board post
- Creative expressions related to anatomy

Extra Credit — Students can earn up to 20 points toward their exam grade through comprehensive mastery exams for each exam module (1-4). These can be completed at any point once they have opened (these will all open in the second half of the semester). These mastery exams take the place of a comprehensive final and will cover less detailed information from each exam module (1-4). They are not mandatory, but certainly are encouraged.

#### **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: <a href="https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</a>. Any requests for additional extra credit or special exceptions to these grading policies will be interpreted as an honor code violation (i.e., asking for preferential treatment) and will be handled accordingly.

Minus grades are not assigned for this course. A minimum grade of C is required for all General Education courses, such as this one. Should points need to be altered during the term (not likely, but things like hurricanes and pandemics can really muck things up), these percentages will still be used to calculate grades (i.e., 90% = A).

Letter	Percent of Total Points Associated	<b>GPA Impact of Each</b>
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**

#### **CRITICAL DATES & UF OBSERVED HOLIDAYS**

• May 15: First Day of Summer C Term (Monday)

May 16: End of drop/addMay 29: Memorial Day

• June 19: Juneteenth

• June 26-30: Summer Break

• July 4: Independence Day

Aug 11: Last Day of Summer C Term (Friday)

• Complete list available here: <a href="https://catalog.ufl.edu/UGRD/dates-deadlines/2022-2023/#summerac23text">https://catalog.ufl.edu/UGRD/dates-deadlines/2022-2023/#summerac23text</a>

#### **WEEKLY SCHEDULE**

The following tables outline what you should do each week for LECTURE and for LAB. Following these weekly recommendations will help you meet your weekly deadlines and stay on-track for learning the material at a respectable rate leading up to each exam.

Earning a 100% on the syllabus quiz will give you access to all course contents—so do that first.

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

Week	Dates	Lecture (Chapters/Topics) & Lab (Topics) Schedule	HW Due Dates
1	May 15 – May 19	Lecture: Ch 1 (Intro to Anatomy) + Ch 2 (Cells) Lab: Axial Skeleton	Ch 1 & 2 Mastering HW due Sat May 20 @ 11:59pm EST
2	May 22 – May 26	Lecture: Ch 4 (Tissues) + Ch 5 (Integumentary) Lab: Upper Limb Skeleton	Ch 4 & 5 Mastering HW due Sat May 27 @ 11:59pm EST
3	May 29 – Jun 02	Lecture: Exam 1 Wed May 31 + Ch 6 (Skeletal) Lab: Lower Limb Skeleton	Ch 6 Mastering HW due Sat Jun 03 @ 11:59pm EST

4	Jun 05 – Jun 09	Lecture: Ch 9 (Joints) + Ch 10 (Muscular System) Lab: Lab Exam 1 (Bones) + Craniofacial & Trunk Muscles	Ch 9 Mastering HW due Sat Jun 10 @ 11:59pm EST
5	Jun 12 – Jun 16	Lecture: Finish Ch 10 + Ch 11 (Muscles of the Body) Lab: Upper Limb Muscles	Ch 10 & 11 Mastering HW due Sat Jun 17 @ 11:59pm EST
6	Jun 19 – Jun 23	Lecture: Exam 2 Tues Jun 20 + Ch 12 (Intro to Nervous) Lab: Lower Limb Muscles	Ch 12 Mastering HW due Sat Jun 24 @ 11:59pm EST
7	Jun 26 – Jun 30	Summer Beak – relax, study, do what ya need to do!	
8	Jul 03 – Jul 07	Lecture: Ch 13 (CNS) + Ch 14 (PNS) Lab: Lab Exam 2 (Muscles) + Introduction to Dissection	Ch 13 & 14 Mastering HW due Sat Jul 08 @ 11:59pm EST
9	Jul 10 – Jul 14	Lecture: Ch 15 (ANS) + Exam 3 Fri Jul 14 Lab: Part 1 Dissection – Joints & Muscles	Ch 15 Mastering HW due Sat Jul 15 @ 11:59pm EST
10	Jul 17 – Jul 21	Lecture: Ch 19 (Heart) + Ch 20 (Blood Vessels) Lab: Part 2 Dissection – Brain & Nerves	Ch 19 & 20 Mastering HW due Sat Jul 22 @ 11:59pm EST
11	Jul 24 – Jul 28	Lecture: Ch 22 (Respiratory) + Ch 23 (Digestive) Lab: Part 3 Dissection – Heart & Vessels	Ch 22 Mastering HW due Sat Jul 29 @ 11:59pm EST
12	Jul 31 – Aug 04	Lecture: Finish Ch 23 + Ch 24 (Urinary) Lab: Part 4 Dissection - Respiratory	Ch 23 & 24 Mastering HW due Sat Aug 05 @ 11:59pm EST
13	Aug 07 – Aug 11	Lecture: Ch 25 (Reproductive) + Exam 4 Fri Aug 11 Lab: Part 5 Dissection – Digestive and Urinary	Ch 25 Mastering HW due Fri Aug 11 @ 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 to Doc. A quickly. 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!