

APPLIED HUMAN ANATOMY WITH LAB

APK 2100C ~ 04 CREDITS ~ FALL 2020

INSTRUCTOR INFORMATION:

NAME: Joslyn Ahlgren, Ph.D, ACSM C-EP

OFFICE: FLG 108 (this semester, I am not meeting in-person with students due to coronavirus)

OFFICE PHONE: 352-294-1728 Email: jahlgren@ufl.edu

PREFERRED METHOD OF CONTACT: CANVAS email for currently enrolled students

OFFICE HOURS

A weekly schedule of office hours will be posted in CANVAS under the “Orientation” module. Office hours are held virtually (VOH, virtual office hours) through CANVAS conference function and will be recorded for students who are unable to attend. Students may also request private conferences to discuss exams and grades. If you are local to Gainesville, FL, USA, you are also welcomed to request an in-person meeting.

COURSE INFORMATION:

MEETING TIME/LOCATION

All lectures and labs are online through the CANVAS course management system (<https://elearning.ufl.edu/>). Students can watch lectures, complete online homework, and online labs at their own pace throughout each week. Due dates and exam dates are listed in the table at the end of the syllabus and students are strongly encouraged to follow the suggested reading and lecture schedule.

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 the following areas will be helpful to students taking this course: medical terminology, physiology, physics, chemistry, and/or biology. To be clear: you do not need to have taken any of these courses to be successful in this course.

REQUIRED AND RECOMMENDED MATERIALS

You will need the following resources 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. There will also be a discounted, loose-leaf version print version of the textbook available at the UF Bookstore for students who would like a printed resource for the course. **Textbook: Human Anatomy by Marieb, Wilhelm, Mallatt, 9th edition. Pearson.**
- **DISSECTION KIT:** This dissection kit will provide you with a fetal pig, a sheep heart and brain, a cow eyeball, and all dissection tools needed. The only thing not provided are gloves. Ordering information will be provided to you on CANVAS. This is a required component of the course.
- **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.
- **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:** You won't always need these, but it's best to have some just in case you do. Sometimes the preservative liquid dribbles and you'll want to wipe it up asap.

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 and final exams (which will utilize Proctor U) are based on the learning objectives from the lectures. 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 in Mastering where students will identify images of these 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.

GENERAL EDUCATION SUBJECT AREA GOALS

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 course purpose explains how these objectives will be met.*

COURSE LEARNING OBJECTIVES

The following table describes the UF General Education student learning outcomes (SLOs) and the specific learning objectives for APK 2100c. By the end of this course, students should be able to:

| Gen Ed SLOs | APK 2100c Course Goals | Assessment Methods |
|--|---|---|
| Content: Demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline. | <ul style="list-style-type: none"> Identify and describe gross and microscopic structures of the organ systems covered. Describe the relationship between structure and function at all levels of organization (cellular, tissue, organ, system, organism). | <ul style="list-style-type: none"> Homework problems All lecture exams Lab exams Dissection project |
| Communication: Communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline. | <ul style="list-style-type: none"> Communicate with peers and professionals using anatomical terminology. | <ul style="list-style-type: none"> Dissection project Virtual office hours |
| Critical Thinking: Analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems. | <ul style="list-style-type: none"> Predict functions of unknown body structures if given the anatomical make-up or vice-versa (predict anatomical make-up of body structures if given clues about function). Predict potential causes of disease/injury symptoms from a functional anatomy perspective. | <ul style="list-style-type: none"> Clinical scenario homework problems All lecture exams |

COURSE AND 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.

Aspects of this course may be recorded for students in the class to revisit. If you participate with your camera engaged or utilize a profile image, you are agreeing to have yourself/image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image during recorded sessions. Students who un-mute during class and participate orally during recorded sessions are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded, you will need to keep your mute button activated and communicate using the "chat" feature.

PERSONAL CONDUCT POLICY

Students are expected to exhibit behaviors that reflect highly upon themselves and our University:

- Read and refer to the syllabus

- Submit assignments on time
- Show respect for the authority and expertise of the course instructor through politeness and use of proper titles (e.g., “Dr. Ahlgren” or “Doc. A”)
- Use of professional, courteous standards for all emails and discussion posts:
- Descriptive subject line
- Address the reader using proper title and name spelling
- Body of the email should be concise but have sufficient detail
- Give a respectful salutation (e.g., thank you, sincerely, respectfully)
- No textspeak (e.g., OMG, WTH, IMO)
- Adherence to the UF Student Honor Code: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>
 - Honor code violations of any kind will not be tolerated, and sanctions will be determined by the course instructor for first-time violators
 - Any use, access, or handling of technology during an exam will result in a zero on the exam and potential failure of the course
 - All allegations, regardless of the severity, will be reported to the Dean of Students Office for University-level documentation and processing
 - *Sharing or posting of Doc. A’s lecture videos anywhere is strictly prohibited and will be processed as an Honor Code violation. Students who are aware of such sharing/posting of the lecture videos are obligated to disclose that information to their course instructor.*
 - Cheating on the dissection project has been a problem in the past. It is not acceptable to “borrow” dissection images from the web and submit them as your own. That is plagiarism and a clear violation of the UF student honor code.

EXAM MAKE-UP POLICY

To schedule a make-up exam, please email the course instructor in CANVAS as soon as possible. Documentation must be submitted with that email.

Unexcused missed exams will result in a zero on the exam. If you are sick or have an emergency that prevents you from taking the exam at the scheduled time, it is your responsibility to contact the instructor as soon as possible.

Documentation of the illness or emergency will be required. If you need to schedule a make-up exam, please email the course instructor giving a detailed explanation and attaching any documentation that verifies your excuse. Scheduling make-up exams is the responsibility of the student and should be done—if at all possible—before the scheduled exam time. If you have a serious emergency or death, please contact the Dean of Students Office (www.dso.ufl.edu) and they will contact your instructor on your behalf. Make-up exams are NOT permitted for the following (among others): family vacation, sporting event travel, having exams in other classes on the same day.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at:
<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

ACCOMMODATING STUDENTS WITH DISABILITIES

I am committed to creating a course that is inclusive in its design. If you encounter barriers, please let me know immediately so that we can determine if there is a design adjustment that can be made or if an accommodation might be needed to overcome the limitations of the design. I am always happy to consider creative solutions as long as they do not compromise the intent of the assessment or learning activity. 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. I welcome feedback that will assist me in improving the usability and experience for all students.

It is important for students to share their accommodation letter with their 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 AND WELLNESS

- U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu 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.ulib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- 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:

The following table outlines the graded components of the course.

| Evaluation Components (number of each) | Approximate % of Total Grade |
|---|---------------------------------|
| Syllabus Quiz | 0% |
| Lecture Exams (4) | 25% |
| Homework (20) | 20% |
| Lab Exams (2) | 20% |
| Dissection Project (6) | 20% |
| Engagement (varies) | 5% |
| Comprehensive Final (1) | 10% |

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 30-40 questions. Questions will be 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 one piece of blank scratch paper and a pencil. 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 (see schedule at end of syllabus for due dates). 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.

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 those muscles or muscle groups.

Lab Exams will NOT be proctored. 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 30 minutes to complete the exam. The Lab exams will be 50 multiple choice questions in 30 minutes, 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!

Dissection Project – A dissection kit is required for this course. Ordering instructions for the kit are located at the end of this syllabus and will also be posted in CANVAS. 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.

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.

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

Comprehensive Final – The final exam will consist of 80 multiple-choice and true-false questions in a 2-hour block. A guide will be posted in CANVAS to assist you in studying for this exam. Students are encouraged to wait until after the last midterm to focus on this study guide. Exams will be managed by Honor Lock. Exams will be open for 24 hours— students must complete the exam within that time frame. This test is to assess your breadth and retention of knowledge, so minor details are less important than in the midterm exams.

GRADING SCALE

Grades will be posted in the CANVAS gradebook. If you feel there is ever an error in the gradebook (or if you just have questions), please use CANVAS email to contact your instructor as soon as possible and certainly before the last day of the semester. I do not assign minus grades. *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. More detailed information regarding current UF grading policies can be found here: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

| Letter Grade | Percent of Total Points Associated with Each Letter Grade | GPA Impact of Each Letter Grade |
|--------------|---|---------------------------------|
| A | 90.00-100% | 4.0 |
| B+ | 87.00-89.99% | 3.33 |
| B | 80.00-86.99% | 3.0 |
| C+ | 77.00-79.99% | 2.33 |
| C | 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.

BEFORE DAY 1 of CLASS: Read instructor welcome announcement, read syllabus, and take syllabus quiz in canvas.

| Week | Date | Chapter - Topic (reading pages) | Homework and Lab Activities |
|------|-----------------|---|--|
| 1 | Aug 31 – Sep 04 | Ch. 1 – Intro to Body (1-9, 11-13) Ch. 2 – Cells (22-35) | HW – Ch. 1 and 2 – due Fri at 11:59pm Lab: Axial Skeleton – The Skull |
| 2 | Sep 07 – Sep 11 | <i>Sep 07 is Martin Luther King Jr. Day</i> Ch. 4 – Tissues (64-95) | Lab: Axial Skel – Vertebrae and Thorax HW – Ch. 4 - due Fri at 11:59pm |
| 3 | Sep 14 – Sep 18 | Ch. 5 – Integumentary (103-116) | Lab: Pectoral Girdle and Upper Limb Bones HW – Ch. 5 – due Fri at 11:59pm |
| 4 | Sep 21 – Sep 25 | Lecture Exam 1 (Opens 5am Mon Sep 21) Ch. 6 – Skeletal (123-141) | Lab: Pelvic Girdle and Lower Limb Bones HW – Ch. 6 due Fri at 11:59pm |
| 5 | Sep 28 – Oct 02 | Ch. 9 – Joints (208-221 and specific joints covered in lecture) | HW – Ch. 9 due Fri at 11:59pm Lab Exam 1: Bones (Opens 5am Fri Oct 02) |
| 6 | Oct 05 – Oct 09 | Ch. 10 – Muscle Tissue (241-254) | HW – Ch. 10 due Fri at 11:59pm Lab: Craniofacial Muscles |
| 7 | Oct 12 – Oct 16 | Ch. 11 – Muscles (262-266, 270-273) | HW – Ch. 11 due Fri at 11:59pm Lab: Trunk Muscles |
| 8 | Oct 19 – Oct 23 | Lecture Exam 2 (Opens 5am Mon Oct 19) Ch. 12 – Intro to Nervous (349-364) | HW – Ch. 12 due Fri at 11:59pm Lab: Upper Limb Muscles |
| 9 | Oct 26 – Oct 30 | Ch. 13 – CNS (374-377, 401-412, Optional: 378-400, 413-419) | HW – Ch. 13 due Fri at 11:59pm Lab: Lower Limb Muscles |

| Week | Date | Chapter - Topic (reading pages) | Homework and Lab Activities |
|---|-----------------|--|---|
| 10 | Nov 02 – Nov 06 | Ch. 14 – PNS (427-428, 432-446, 459-460) Ch. 15 – ANS (467-476, 480) | HW – Ch. 14 and 15 due Fri at 11:59pm Lab Exam 2: Muscles (Opens 5am Fri Nov 06) Lab: Dissection Intro – due 11:59pm on Sun Nov 08 |
| 11 | Nov 09 – Nov 13 | Lecture Exam 3 (Opens 5am Mon Nov 09) <i>Nov 11 is Veteran's Day</i> Ch. 19 – Heart (562-574, 577-580) | HW – Ch. 19 due Fri at 11:59pm Lab: Pig Muscles and Joints Dissection – due 11:59pm on Sun Nov 08 |
| 12 | Nov 16 – Nov 20 | Ch. 20 – Vessels (588-597, 616--hepatic portal) | HW – Ch. 20 due Fri at 11:59pm Lab: Sheep Brain/Pig Nerves Dissection – due 11:59pm on Sun Nov 15 |
| 13 | Nov 23 – Nov 27 | Ch. 22 – Respiratory (645-663) Ch. 23 – Digestive (675-711; there is a lot of detail in this chapter we will not cover) | HW – Ch. 22 and Ch. 23 due Fri at 11:59pm Lab: Sheep Heart / Pig Heart and Vessels Dissection – due 11:59pm on Sun Nov 22 |
| 14 | Nov 30 – Dec 04 | Ch. 24 – Urinary (720-736) <i>Nov 25-28 is Thanksgiving break</i> | HW – Ch. 24 due Fri at 11:59pm Lab: Pig Lungs Dissection – due 11:59pm on Sun Nov 29 |
| 15 | Dec 07 – Dec 11 | Lecture Exam 4 (Opens 5am Wed Dec 09) | Lab: Pig Digestive and Urinary Dissection – due 11:59pm on Sun Dec 06 |
| Comprehensive Final: Opens Thursday 12/17/20 @ 5am, Closes Saturday 12/19/20 11:59pm | | | |

SUCCESS AND STUDY TIPS:

STUDY TIPS FOR DOC. A'S CLASS

- Read the assigned pages from the text BEFORE you watch a lecture. Do not take notes, underline, highlight, or attempt to memorize anything from the first read of the text...JUST READ and enjoy!
- Snowball the lecture notes. Begin studying lecture material immediately after the first lecture. Then, after the second lecture, begin your studies with day one lecture material. Continue this all the way up to the exam.
- Engage your classmates. This material is meant to be discussed...and you can't do that well with just yourself. Post questions to the discussion board. Exchange contact information and have a phone conversation. Post cool videos you find regarding related material to the discussion boards. ENGAGE!
- If there is something in the textbook that was NOT in lecture, you are not expected to know it.
- Re-write questions. Taking complex questions and breaking them down to identify exactly what the question is REALLY asking for is very helpful. It is also helpful to look at incorrect answer choices and identify what makes those choices wrong. Ask yourself, "How could I make that statement correct?" A good place to look for these types of questions is at the end of each chapter – the critical thinking questions.

SUCCESS TIPS FOR DOC. A'S CLASS

- Do not fall behind. This course moves at a fast pace...and you can easily get overwhelmed if you procrastinate.
- Stay organized. Keep track of all-important due dates and move through each module in a uniform manner so that you are always aware of what you have done and what is left to be completed.
- Check CANVAS announcements/emails daily...just pretend it is Facebook for school. Your course instructor will post important and helpful information (such as friendly reminders of upcoming due dates) as announcements.
- Have a positive attitude! Approaching the course with a defeatist attitude will hinder your learning and grade...crack a smile now and then. THIS STUFF IS COOL!

PERSONAL NOTE FROM DOC. A

If you are totally overwhelmed by the stresses of your semester and feel like you just can't handle the pressure, please contact me or someone at UF's Counseling and Wellness center. I genuinely care for my students' wellbeing. Without you, I would have no one to teach...and that's uncool.

Also, it is important to me that you feel welcome and safe in this class; and that you are comfortable participating in class discussions and communicating with me. If your preferred name is not what shows on the official UF roll, please let me know. I would like to acknowledge your preferred name and pronouns that reflect your identity. You may also change your "Display Name" in Canvas. Canvas uses the "Display Name" as set in myUFL. The Display Name is what you want people to see in the UF Directory, such as "Ally" instead of "Allison." To update your display name, go to one.ufl.edu, click on the dropdown at the top right, and select "Directory Profile." Click "Edit" on the right of the name panel, uncheck "Use my legal name" under "Display Name," update how you wish your name to be displayed, and click "Submit" at the bottom. This change may take up to 24 hours to appear in Canvas. This does not change your legal name for official UF records.

Let's ROCK this semester, yeah?!

Doc. A

