

# APPLIED HUMAN ANATOMY WITH LAB

APK 2100c ~ 4 CREDITS ~ SUMMERB2017

*“Descriptive anatomy is to physiology what geography is to history, and just as it is not enough to know the typography of a country to understand its history, so also it is not enough to know the anatomy of organs to understand their functions”*

— Claude Bernard

**INSTRUCTOR:**

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**OFFICE HOURS:**

Virtual office hours via CANVAS by Appointment

**LECTURE TIME/LOCATION:**

Lectures are ONLINE-This class does **NOT** meet each day. There may be review sessions scheduled during the lecture time and those will be announced via CANVAS

However, we will meet for **4 Exams** (see dates below) on period 1 (8am-9:15am) in CSE A101

**LAB TIME/LOCATION:**

SECTION	LAB TIME	LAB LOCATION
4D36	MW 5-6 (2:00-4:45pm)	FLG 107B
4D37	TR 5-6 (2:00-4:45pm)	FLG 107B
4D38	MW 3-4 (11:00am-1:45pm)	FLG 107B
4D39	TR 3-4 (11:00am-1:45pm)	FLG 107B
4910	MW 2-3 (9:30am-12:15pm)	FLG 107A
4911	MW 4-5 (12:30-3:15pm)	FLG 107A
4912	TR 2-3 (9:30am-12:15pm)	FLG 107A
4913	TR 4-5 (12:30-3:15pm)	FLG 107A

**COURSE FORMAT:** This is a web-based course and video lectures will be posted.

**COURSE DESCRIPTION:** This anatomy course will describe the human body from a systemic approach. This course covers not only gross anatomy of the body's organs and systems, but also the functionally significant microscopic/histological aspects of these larger structures. The following systems will be covered in this course: **integumentary, circulatory, musculoskeletal, respiratory, digestive, urinary, nervous, and reproductive.**

**PREREQUISITE KNOWLEDGE AND SKILLS:** There are no prerequisites for this course; however, any previous experiences in the following areas will be helpful to students: medical terminology, physiology, physics, chemistry, and/or biology.

**GENERAL EDUCATION SUBJECT AREA 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 course purpose explains how these objectives will be met.*

**PURPOSE OF COURSE:** The purpose of this course is to introduce students to anatomy (the study of the body's structures) and to present information and engage students in a way that promotes critical and creative thinking within the context of health and movement studies. Students will be asked to not only identify important structures of the human body, but also to incorporate some of the functions of the structures and tissues so that the information can be applied to novel, clinical scenarios. 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.

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

Gen Ed SLOs	APK 2100c Course Goals	Assessment Methods
<p><b>Content:</b> Demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.</p>	<ul style="list-style-type: none"> <li>• Identify and describe gross and microscopic structures of the organ systems covered.</li> <li>• Describe the relationship between structure and function at all levels of organization (cellular, tissue, organ, system, organism).</li> </ul>	<ul style="list-style-type: none"> <li>• Homework problems</li> <li>• All lecture exams</li> <li>• Lab exams 1 &amp; 2</li> </ul>
<p><b>Communication:</b> Communicate</p>	<ul style="list-style-type: none"> <li>• Communicate with peers and</li> </ul>	<ul style="list-style-type: none"> <li>• Oral communication</li> </ul>

knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.	professionals using anatomical terminology.	assessment using anatomical models
<b>Critical Thinking:</b> Analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.	<ul style="list-style-type: none"> <li>• 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).</li> <li>• Predict potential causes of disease/injury symptoms from a functional anatomy perspective.</li> </ul>	<ul style="list-style-type: none"> <li>• Clinical scenario homework problems</li> <li>• All lecture exams</li> <li>• Lab Exam 1</li> </ul>

**REQUIRED COURSEPACK:** Please note that APK2100 will be participating in the UF All Access program. Students will have two options to gain access to the required Mastering A&P materials when classes begin. Students will have to choice to “Opt-In” to Mastering A&P access through a link provided in CANVAS once classes begin for a reduced price and pay for these materials through their student account (detailed step by step instructions can be found in a file on the CANVAS Site). 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 an additional printed resource for the course.

**Textbook:** Human Anatomy by Marieb, Wilhelm, Mallatt, 8<sup>th</sup> edition. Pearson.

## COURSE POLICIES:

**ATTENDANCE POLICY:** Attendance will be taken in lab, but it will not affect your grade. Attend the lab section for which you are enrolled, not the one most convenient for you on any given day. If you have to miss your lab for any reason, please make arrangements with your TA to attend another lab section that week. Although attendance is not required for the lab, it is absolutely IMPERATIVE for your success in this course. You must attend all exams for the course, which meet in person.

**PERSONAL CONDUCT POLICY:** Students are expected to exhibit behaviors that reflect highly upon themselves and our University:

- Read and refer to the syllabus
- Arrive to lecture and lab on time (a few minutes early)

- Show respect for the authority of the course instructor and graduate TAs through politeness and use of proper titles (e.g., “Dr. Adihetty” or “Doc. A”)
- Use of professional, courteous standards for all emails and discussions:
  - 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)
- No texting or checking Face Book (or the like) during class/lab instruction time
- No personal conversations during class/lab instruction time
- Adherence to the UF Student Honor Code:
  - <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-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

**EXAM MAKE-UP POLICY:** Unexcused missed exams will result in a zero on the exam (this includes contacting the instructor **after** the exam if you are ill). Make-up exams will be given at the discretion of the instructor. To schedule a make-up exam, please contact the instructor via email fill out the **make-up exam request form** posted in CANVAS and submit it to your course instructor. Documentation will be required. If you have a serious emergency or life event, please contact the Dean of Students Office ([www.dso.ufl.edu](http://www.dso.ufl.edu)) and they will contact your instructor so that you do not have to provide documentation of the emergency/death in order to get a make-up exam. Requirements for class attendance and make-up exams, 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>.

**UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES:** Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

**UNIVERSITY POLICY ON COURSE EVALUATIONS:** Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are

typically open during the last two or three weeks of the semester, but students will be given specific times when they are open.

## GRADING POLICIES:

The following table outlines the point-accruing components of the course. The total points earned from each component will be summed and divided by 700.

Evaluation Components (number of each)	Points Per Component	% of Total Grade
Lecture Exams (4)	60 pts each = 240 pts	$240/650 = 36.9\%$
Homework (4)	50 pts each = 200 pts	$200/650 = 30.8\%$
Lab Exams (2)	100 pts each = 200 pts	$200/650 = 30.8\%$
Communication Assessment (1)	10 pts each = 10 pts	$10/650 = 1.5\%$
Extra Credit	15 points possible	0%

**Lecture Exams** – Each exam will consist of 40 questions, 1.5 points per question. Questions will be multiple choice and true/false. Students are not permitted access to any kind of materials or notes during these exams. Exam questions are generated by the course instructor and the majority of focus should be given to the lecture notes when studying. Students will take exams in the same room where weekly meetings are held and will be allowed 45 minutes to complete the exam.

**Homework** – Each of the four homework assignments is due at the time of the corresponding exam. 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. **For the fill in the blank questions, spelling and proper tense of the word counts.** 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. It is **not** prudent to complete the homework at the last minute as a “practice test.”

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 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 of homework will not be accepted.** However, if you complete some of the questions, but fail to complete all questions prior to the deadline,

those completed will be automatically submitted at the due date/time and added to the gradebook....so, *you are encouraged to complete questions as you go.*

**Lab Exams** – Lab exams will be practical “bell-ringer” exams in which the student moves from station to station identifying gross anatomical structures. These exams consist of 40 stations, 2 questions per station, and students have 40 minutes to complete the exam. Students will be asked to sign up for a lab exam time. Sign-up sheets will be available in the study lab the week preceding the exam. **Students who do not arrive on time (i.e., 10 minutes early) for their exam will need to wait outside the lab for the next exam time. If there is not room in the next exam time, the student will need to continue waiting until an opening is available.**

**Communication Assessment** – Students will be assessed on their ability to effectively communicate using anatomical terminology. Students will select any lab model they like and orally describe the model and answer basic questions about it. A grading rubric for this assessment will be posted in CANVAS for you to use to prepare. Please work with your lab TA to schedule and complete this assessment.

**Extra Credit** - Students can earn up to 15 points of extra credit in this course. Each lab TA will assign extra credit differently, so it is the students’ responsibility to learn their TA’s policies for earning extra credit. Up to 5 of the 15 points of extra credit can be earned for participating as a subject in an approved research study. Approved studies will be announced via CANVAS throughout the semester. Participation in a research study is NOT necessary to earn the maximum amount of extra credit. Participation in a research study CANNOT earn you more than 15 points of extra credit. If you do participate in a study, the study coordinator will give your name and extra credit points to the Anatomy Lab Coordinator at the end of the semester. **All extra credit points will be uploaded to the gradebook prior to the last day of classes. Any discrepancies must be brought to the attention of your TA before 5pm on the last reading day.**

**GRADING SCALE:** Lecture and lab exam grades will be posted directly into the CANVAS gradebook. Grades for homework assignments will be displayed in the MasteringA&P gradebook. At the end of the semester, all points from the MasteringA&P gradebook will be summed and transferred to the CANVAS gradebook as one value. Once homework grades are summed, the final value is rounded up to the nearest whole number prior to being entered into the CANVAS gradebook. Any discrepancies with points displayed in either gradebook should be pointed out to the instructor before the last day of class. **There is no curve for this course. However, final grades will be rounded up (i.e. 89.6 would be rounded up to a 90).** See the UF undergraduate catalog web page for information regarding current UF grading policies: [www.registrar.ufl.edu/catalog/policies/regulationgrades](http://www.registrar.ufl.edu/catalog/policies/regulationgrades). **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.

Letter Grade	Points Needed to Earn Each Letter Grade	Percent of Total Points Associated with Each Letter Grade	GPA Impact of Each Letter Grade
A	≥ 585	90.00-100%	4.0
B+	565.5-584.94	87.00-89.99%	3.33
B	520-565.44	80.00-86.99%	3.0
C+	500.5-519.94	77.00-79.99%	2.33
C	455.0-500.44	70.00-76.99%	2.0
D+	435-454.94	67.00-69.99%	1.33
D	390-435.44	60.00-66.99%	1.0
E	≤ 389.94	0-59.99%	0

## GETTING HELP:

For issues with technical difficulties for CANVAS, please contact the UF Help Desk at:

- [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu)
- (352) 392-HELP - select option 2
- <https://request.it.ufl.edu/>

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are also available for you:

- Disability resources  
<https://www.dso.ufl.edu/drc/>
- Library Help Desk  
<http://guides.uflib.ufl.edu/content.php?pid=86973&sid=686381>
- Counseling and Wellness  
<http://www.counseling.ufl.edu/cwc/Self-Help-Library.aspx>

## COURSE SCHEDULE:

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

Dates	Lecture Topic (s)	Required Reading Pages	Lab Topic (s)
Jun 26	Ch. 1 – Introduction	(1-9, 11-13)	Lab 1: Axial Skeleton
Jun 27	Ch. 1 and 2 – Cells	(1-9, 11-13); (22-35)	
Jun 28	Ch. 2 and 4 – Tissues	(22-35) ; (64-97)	Lab 2: Appendicular Skeleton
Jun 29	Ch. 2 and 4 – Tissues	(22-35); (64-97)	
Jun 30	Ch. 4 and 5 – Integumentary	(103-116)	
Jul 3	<b>Exam 1</b>	<b>(ch1,2,4,5) (HW1 due at 11:59pm)</b>	Lab 3: Upper Limb Muscles
Jul 4	<b>No Class-Independence Day</b>		
Jul 5	Ch. 6 – Bones	(123-140)	Lab 4: Lower Limb Muscles
Jul 6	Ch. 9 – Joints	(208-221)	
Jul 7	Ch.9-Continued	(208-221)	
Jul 10	Ch. 10- Muscle Tissue	(241-254)	Lab Exam 1
Jul 11	Ch. 10-continued	(241-254)	
Jul 12	Ch. 11-Muscles	(262-266, 268-271)	Lab Exam 1
Jul 13	Ch.11-Continued	(262-266, 268-271)	
Jul 14	<b>Exam 2</b>	<b>(Ch 6,9,10,11) (HW2 due at 11:59pm)</b>	
Jul 17	Ch. 12-Intro to Nervous	(349-364)	Lab 5: Joints, Skin, Eyes, Ears
Jul 18	Ch. 12-continued	(349-364)	
Jul 19	Ch. 13-CNS	(374-377, 401-412, optional: 378-400, 413-419)	Lab 6: Nervous
Jul 20	Ch.13-Continued	(374-377, 401-412, optional: 378-400, 413-419)	
Jul 21	Ch. 14- PNS	(427-428, 432-446, 459-460)	
Jul 24	Ch. 15- ANS	(467-476, 480)	Labs 7-8: Circulatory, Respiratory
Jul 25	<b>Exam 3</b>	<b>(Ch12,13,14,15)</b>	
Jul 26	Ch.19-Heart	(562-574, 577-580)	Labs 9-10: Digestive, Urinary, Reproductive
Jul 27	Ch.20-Blood Vessels	(588-597, 616-hepatic portal)	
Jul 28	Ch.20 and 22-Respiratory	(645-663)	
Jul 31	Ch.22 Continued	(645-663)	Lab Exam 2
Aug 1	Ch.23 Digestive	(675-711)	
Aug 2	Ch.24 Urinary	(720-736)	Lab Exam 2
Aug 3	Ch. 24 Continued	(720-736)	
Aug 4	<b>Exam 4</b>	<b>(Ch 19, 20, 22, 23, 24)</b>	



### STUDY TIPS FOR DOC. A's CLASS:

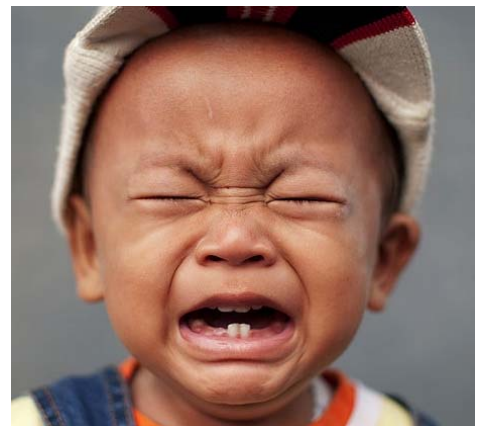
- Read from the text BEFORE watching a lecture. Do not take notes, underline, highlight, or attempt to memorize anything...JUST READ and enjoy!
- Snow-ball the lecture notes. Begin studying lecture material immediately after the first lecture. Then, after the second lecture, begin your studies with day one lecture material. Continue this all the way up to the exam.
- If there is something in the textbook that was NOT in lectures, you are not expected to know it. There is a lot in the text that we don't have time to cover.
- 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 very helpful to look at incorrect answer choices and identify what makes those choices wrong. Ask yourself, "How could I make that statement correct?" **You can practice this with the critical thinking questions at the end of each chapter.**
- Google novel images. For example, if there is a picture of the brainstem in your notes, Google "brainstem images" and see if you can identify the structures from the lecture.
- Google diseases or drug mechanisms of action. 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?

### 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. Avoid studying at the last minute.
- 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.
- 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 due dates) as announcements.
- Have a positive attitude! 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 (<http://www.counseling.ufl.edu/cwc/Self-Help-Library.aspx>). I genuinely care for my students' wellbeing. Without you, I would have no one to teach...and that's uncool. Please take care! ~Doc. A



# MasteringA&P®

Dear Anatomy Student: In this course you will be using Mastering A&P®, an online tutorial and homework program that accompanies your textbook. Detailed instructions and a step-by-step guide to incorporating the Mastering A&P into CANVAS can be found on a CANVAS page for this course.

## Support

Please access Customer Support at [www.masteringAandP.com/support](http://www.masteringAandP.com/support), for help with:

- Log-in problems
- System Requirements
- Answers to Frequently Asked Questions
- Registration Tips & Tricks video
- Additional contact information for Customer Support, including Live Chat

Additionally, Brad Maynard, is the Learning Technology Consultant with Pearson publishing and he can be reached at [brad.maynard@pearson.com](mailto:brad.maynard@pearson.com).