

Department of Applied Physiology and Kinesiology

# **UNIVERSITY of FLORIDA**

# KINETIC ANATOMY

APK 4103C / APK 5102 ~ 3 CREDITS ~ SPRING 2020

INSTRUCTOR: Joslyn Ahlgren, Ph.D.

Office: FLG 108

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

Currently enrolled students: please use CANVAS email

**OFFICE HOURS:** A schedule of office hours will be posted in CANVAS during

the first week of classes.

**LECTURE TIME/ROOM:** T/R Period 2: 8:30-9:20am FLG 235

**LAB TIME/ROOM:** R Periods 4-5: 10:40am-12:35pm FLG 107B

**COURSE DESCRIPTION:** Provides in-depth coverage of musculoskeletal anatomy as a foundation for learning components of simple and complex motor tasks; emphasizes proper execution and analysis of joint movement and common exercises.

**PREREQUISITE KNOWLEDGE AND SKILLS:** APK 2100C and APK 3220C (or equivalents); instructor permission.

**REQUIRED AND RECOMMENDED MATERIALS:** You will need the following textbook for this course: Manual of Structural Kinesiology, 19<sup>th</sup> edition, R.T.Floyd, ISBN: 978-0-07-336929-7. If you struggle with memorizing and find flashcards helpful, I recommend the following: Anatomy and Kinesiology Flashcards, Human Kinetics, ISBN: 978-1-4504-2837-8.

**COURSE FORMAT:** <u>Tuesdays</u> will be devoted to lecture. Power point slides will be provided in CANVAS. Please print or download those slides and bring them to class for note-taking. Most <u>Thursdays</u> will be devoted to in-class activities and small-group discussions that will provide more active learning. Please come dressed to participate in

movement-based activities. Thursday <u>Labs</u> will consist of a 2-period block in which students can explore anatomy models and gain a better understanding of the 3-D nature of the structures introduced in lecture each week. There may also be movement -based activities and presentations during lab meetings.

COURSE LEARNING OBJECTIVES: After taking this course, students should be able to:

- Name and identify all bones, major bone markings, most muscles, joints, and major joint structures below the skull.
- Give the origin, insertion, and action for major muscles below the skull.
- Contrast healthy vs. dysfunctional joint movements at major joints of the body.
- Predict muscular causes for dysfunctional joint movements and propose corrective solutions for common movement errors – especially for common exercises.

## **COURSE AND UNIVERSITY POLICIES:**

ATTENDANCE POLICY: Attendance will be taken at every lecture and lab. Tuesday lecture attendance is not mandatory, but it is strongly recommended. It is mandatory that students participate in at least 10 of the 11 in-class activities and at least 11 of the 12 labs. Students who participate in all 12 labs are eligible for a grade bump if they are within 1% of a higher grade. Unexcused lab absences are not permitted. For every unexcused lab or class activity absence that is not made-up, the student will receive a grade penalty. For example, if you earned a B+ in the course but have an un-made up lab or class activity, you will receive a B. If you have to miss class for a legitimate reason, please contact the instructor to request a make-up assignment. Documentation of a valid reason for missing must accompany the request. Make-up assessments are at the discretion of the instructor.

**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. Ahlgren" 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
  - o Give a respectful salutation (e.g., thank you, sincerely, respectfully)
  - No textspeak (e.g., OMG, WTH, IMO)
  - The course instructor will provide constructive feedback on less than professional emails received—heads up.
- 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: <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>
  - 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 <u>and</u> 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 assessments will result in a zero on the assessment (this includes contacting the instructor **after** the assessment if you are ill). Make-up assessments will be given at the discretion of the instructor. To schedule a make-up assessment, please fill out the **make-up exam request form** posted in CANVAS and submit it to your course instructor as soon as possible. Documentation will be required. If you have a serious emergency or life event, please contact the Dean of Students Office (<u>www.dso.ufl.edu</u>) 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 assessment.

Requirements for class attendance and make-up exams, 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>.

accommodation for disabilities must first register with the Dean of Students Office (<a href="http://www.dso.ufl.edu/drc/">http://www.dso.ufl.edu/drc/</a>). 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.

Students registered with the DRC: Lab exams will be administered in the lab, <u>not at the DRC</u> – thus, no testing request is required. Please notify your course instructor of your approved accommodations so that appropriate accommodations for these exams can be arranged. We also have in-class assessments at the beginning of each lab. For any in-class assessments, please make sure to make arrangements directly with the course instructor prior to the assessment date. For the final exam, you may take that at the DRC. Please submit your request early in the semester to ensure it is approved on time.

**COURSE EVALUATIONS:** Students in this class are participating in GatorEvals. This evaluation system is designed to be more informative to instructors so that teaching effectiveness is enhanced and to be more seamlessly linked to UF's CANVAS learning

management system. Students can complete their 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>. Thank you for serving as a partner in this important effort.

# **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: <a href="https://counseling.ufl.edu/">https://counseling.ufl.edu/</a>, 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 opti on 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. https://career.ufl.edu/
- 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.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <a href="http://teachingcenter.ufl.edu/">http://teachingcenter.ufl.edu/</a>
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <a href="http://writing.ufl.edu/writing-studio/">http://writing.ufl.edu/writing-studio/</a>
- 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="http://distance.ufl.edu/student-complaint-process/">http://distance.ufl.edu/student-complaint-process/</a>

## **GRADING:**

The following table outlines the point-accruing components of the course for both undergraduate and graduate students. The total points earned from each component will be summed and divided by the total points possible in the course.

## **Undergraduate** Evaluation Criteria

Evaluation Components (n)	Points Per Component	Approx. % of Total Grade
Class Participation (10)	4 pts each = 40 pts	40/300 = 13%
Weekly Assessments (11)	10 pts each = 110 pts	110/300 = 37%
Final OIA Exam (1)	50 pts each = 50 pts	50/300 = 17%
Lab Exams (2)	50 pts each = 100 pts	100/300 = 33%

#### **Graduate** Evaluation Criteria

<b>Evaluation Components</b>	Points Per Component	Approx. % of Total Grade
Class Participation (10)	4 pts each = 40 pts	40/330 = 13%
Weekly Assessments (11)	10 pts each = 110 pts	110/330 = 33%
Final OIA Exam (1)	50 pts each = 50 pts	50/330 = 15%
Lab Exams (2)	50 pts each =100 pts	100/330 = 30%
Presentation (1)	30 pts each = 30 pts	30/330 = 9%

Class Participation — Students must participate in at least 10 of the 11 in-class activities for full points. Some of these activities will require whole-body movements, so athletic attire is strongly advised. The following rubric will be employed to assign participation points. If you do not receive full credit for participation, a note will be made in the gradebook explaining the deduction. If you wish to discuss your deduction, please email the instructor to respectfully request a meeting. Simply showing up to class will not earn you full participation points. If you are introverted, shy, and/or struggle with social interaction, please notify the instructor so a game plan can be generated to help ensure you are successful in the course from day one. It is important that ALL students feel as comfortable as possible in this learning environment for the success of EVERYONE. ©

Preferred (4 pts)	Acceptable (3 pts)	Won't ask you to leave (2 pts)	May ask you to leave (1 pt)	Will ask you to leave (0 pts)
Arrives on time	Arrives no more than 5 min late	Arrives more than 5 min late	Arrives more than 10 min late	Absent
Comments are				Disruptive or rude
relevant and reflect understanding and	Comments are mostly relevant, but	Comments are minimal ("yeah", "uh huh") and	No comments are made	comments are made
good preparation	understanding may be	demonstrate poor		Drawing others into
	slightly lacking	preparation	Sleeping, texting,	disrespectful
Clear enthusiasm			disengaged	behaviors (showing
	Not overly enthusiastic, but positive	Demeanor is sluggish		texts, passing notes, etc.)

Weekly Assessments – Mini "exams" will be administered in the first 15 minutes of each lab. The course instructor will let you know in class on Tuesday of that week what you can expect to see on the assessment that week (i.e., which specific learning objectives to focus on). Generally speaking, the assessment will cover lecture material from that week. Students are expected to engage in independent study prior to lab to prepare for these assessments – which are intended to be brief, but somewhat challenging. Unexcused lab absences will result in a zero on the weekly assessment for that day. Make-up assessments are available to students with excused lab absences.

**Final OIA Exam** – A final exam will be administered to assess your knowledge of the origins, insertions, and actions of certain muscles (list posted in CANVAS). The format of this exam will consist of incomplete tables that you will be responsible for filling in, some drawing of muscles onto pictures of skeletons, and analysis of images of people moving or in a specific position. These will be similar to the types of questions in the

weekly assessments—so those can be used as a guide to the type of questions you can expect.

Lab Exams – Students will have two bell-ringer style lab exams in which they will identify structures pointed out on anatomy models. These exams will be free-response (not multiple choice). Illegible answers will be marked as incorrect. Slight latitude will be given regarding spelling. Each exam will be worth 50 points. There will be 50 structures labeled—two questions per station. Students will have one minute at each station.

**Graduate Student Presentations** - Grad students will give a 15-20 minute presentation on a topic of their choice that is in some way related to class content. **Heavy emphasis should be placed on detailed functional anatomy.** The presentation should be accompanied by a handout for students which should summarize the presentation, list resources used in the making of the presentation, and suggest further reading should students want to explore the topic further. Topics must be approved by the course instructor no later than the first lab meeting. The course instructor will coordinate scheduling with you upon consent of the topic. The rubric below will be used to assess presentations. Any deductions will be explained in the CANVAS gradebook or on a hard copy of this grading rubric to be handed back to the student.

	Excellent (8-10 pts)	Good (5-7 pts)	Fair (2-4 pts)	Poor (0-1 pts)
Scholarly	Includes analysis or synthesis of course materials, personal experiences, and/or scholarly works. Includes citations to external materials of high academic quality (e.g., peer-reviewed). Thoughtful, academic, stimulating. Pertinent to the course.	Usually includes analysis or synthesis of course materials, personal experiences, and/or scholarly works. Citations are of mixed quality (some academic, some less academic). Pertinent to the course.	Significant amount of course material copied or repeated from the course OR copied from external sources without condensing through analysis or synthesis. Citations are of mixed quality—high dependence on corporate websites or the like. Loosely pertinent to the course.	No evidence of cognitive processing of course material or analyzing own experience through the lens of the course content. Not directly relevant to the course. Poorly organized. Poor or no citations given.
Handout	Clear, accurate, concise summary. Clear and organized list of resources. At least 3 appropriate suggested readings. Creative and neatly presented – evident the student went	Summary was clear and accurate, but overly verbose. Clear and organized list of resources. Only 2 appropriate suggested readings. Neatly presented, but no evident	Summary was mostly accurate, but may have missed one major point; was unorganized and/or overly verbose. Clear list of resources used, but slightly disorganized. Only 1	Summary was poorly organized, lengthy, and did not cover major points presented. List of resources was poor or not present. Handout was not neat or organized and

	the extra mile.	enthusiasm or creativity.	appropriate suggested	lacked any enthusiasm
			reading. Neatly	or creativity.
			presented, but no	
			evident enthusiasm or	
			creativity.	
	Correct time (15-20 min).	Time was at least 15 min,	Time was less than 15	Time was less than 10
	Enthusiastic and clear.	but no more than 25 min.	min or more than 25	min. PPT slides were
	PPT slides were not	PPT slides were not overly	min. PPT slides were	wordy, unorganized,
	overly wordy. Included	wordy. Included	fairly wordy. Included	dull, and overall
Presentation	good images and	somewhat generic images	somewhat generic	unnecessary for the
Presentation	excellent examples that	and examples that added	images (or no images)	presentation. Vocal
	added significant value to	moderate value to the	and examples that	intonation was entirely
	the presentation. Vocal	presentation. Vocal	added little to no value.	monotone and
	intonation was good from	intonation was mostly	Mostly monotone	unenthused.
	start to finish.	good—some lulls.	speaking	

**GRADING SCALE:** All grades will be posted in the CANVAS gradebook. Any discrepancies with points displayed in the gradebook should be pointed out to the instructor before the last day of class (prior to reading days). There is no curve for this course and grades will not be rounded up unless you qualify for such (see attendance policy). Any requests for 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. 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>.

Grade	Percent of Total Points Needed	<b>GPA Impact</b>
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
Е	0-59.99%	0

# **WEEKLY COURSE SCHEDULE:**

Please check your CANVAS announcements *DAILY*. While changes are not anticipated, sometimes "stuff happens." Any changes to this schedule will be posted as an announcement in CANVAS.

Dates	Lecture	Lab	
Jan 07	Syllabus review and course introduction	No labs during first week of classes	
Jan 09	General Concepts in Musculoskeletal Anatomy	No labs during first week of classes	
Jan 14	Levers & General Movement Patterns (video lecture)*	Weekly Assessment 1	
Jan 16	Muscle Control Formula Introduced (video lecture)*	Relearning the skeleton	
Jan 21	Core Anatomy (slides 1-24)	Weekly Assessment 2	
Jan 23	In-class Discussion and Activity 1 (slides 25-36)	The Core Joints	
Jan 28	Core Anatomy (slides 37-55)	Weekly Assessment 3	
Jan 30	In-class Discussion and Activity 2 (slides 56-68)	The Core Muscles	
Feb 04	Shoulder Anatomy	Weekly Assessment 4	
Feb 06	In-class Discussion and Activity 3	The Shoulder	
Feb 11	Shoulder Anatomy	Weekly Assessment 5	
Feb 13	In-class Discussion and Activity 4	The Shoulder Continued	
Feb 18	Elbow/Wrist/Forearm Anatomy	Weekly Assessment 6	
Feb 20	In-class Discussion and Activity 5	The Elbow/Wrist/Forearm	
Feb 25	In-class Discussion and Activity 6	Practical 1: Core and Upper Extremity	
Feb 27	Review and prepare for practical exam 1		
Mar 03	Spring Prook	Spring Break	
Mar 05	Spring Break		
Mar 10	Hip Anatomy	No lab this week – Doc. A at the ACSM	
Mar 12	No class meeting this day – review your hip anatomy	Health and Fitness Summit	
Mar 17	Knee Anatomy	Weekly Assessment 7	
Mar 19	In-class Discussion and Activity 7	The Hip	
Mar 24	Knee Anatomy	Weekly Assessment 8	
Mar 26	In-class Discussion and Activity 8	The Knee	
Mar 31	Ankle Anatomy	Weekly Assessment 9	
Apr 02	In-class Discussion and Activity 9	The Ankle/Foot	
Apr 07	Hip/Knee/Ankle Continued as needed	Weekly Assessment 10	
Apr 09	Muscle-Fascia Interface / Stretching	Last lab: Mobility	
Apr 14	In-class Discussion and Activity 10	Practical 2: Lower Body	
Apr 16	Review and prepare for practical exam 2		
Apr 21	In-class Discussion and Activity 11	No Lab this weekreading dayprepare	
Apr 23	Reading Day – No Class or Lab	for your OIA final exam	
OIA Final Exam – Wed. Apr 29 – 10am-12pm – FLG 235			

## **SUCCESS AND STUDY TIPS:**

- Read and look over the figures BEFORE you come to lecture or lab.
- 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.
- Engage your classmates and study as actively as possible. You have a body...USE ITI
- Do not fall behind or procrastinate your studies.
- Check CANVAS announcements/emails daily...just pretend it is Facebook for school. Your course instructor will post important and helpful information as announcements.
- Use the Anatomy Help Center on a weekly basis. A schedule of open hours will be posted in CANVAS. The Help Center opens in the third week of classes.
- Have a positive attitude! THIS STUFF IS COOL!
- Rehearse your OIAs starting in week one of classes and build on this studying each
  week. Do not procrastinate learning these! You need to know enough origin and
  insertion information about each muscle listed to correctly place the muscle on
  the body and have it perform the correct actions. This guideline should help you
  when you encounter variations of OIAs—which you will.

#### 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