Department of Applied Physiology and Kinesiology College of Health and Human Performance UNIVERSITY of FLORIDA

Evidence Based Musculoskeletal Examination I

ATR 7210c | 3 Credits | Fall 2025

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Course Info

INSTRUCTOR Dr. Brady L. Tripp, LAT, ATC

Office: 148 FLG

Office Phone: 352-294-1725 Email: trippb@ufl.edu

Preferred Method of Contact: Email

OFFICE HOURS By appointment, Tuesdays 2:00-4:00, email to confirm.

MEETING In-person

TIME/LOCATION Tuesdays, 7:25 AM-10:25 AM / Yon Hall 11

COURSE DESCRIPTION

Athletic Trainers develop skills and appraise the principles and procedures used in the musculoskeletal assessment of upper-extremity function and dysfunction. Topics include the statistical evaluation of diagnostic tests, 3-dimensional kinematics, interpreting contemporary diagnostic tests and treatment of upper-extremity pathology/dysfunction and critical reviews of related research.

PREREQUISITE KNOWLEDGE & SKILLS

Pre-requisite: ATR 7108c Clinical Management in Athletic Training.

REQUIRED & RECOMMENDED MATERIALS

Reading materials will be available on the class Canvas page or the instructor will provide soft or hard copies in person. Journal articles will be used frequently. Other articles will be available online and retrieved from various libraries.

COURSE FORMAT

Course material will be presented through video and in-person lectures, online materials, and interactive workshop formats with 3.0 contact hours per week. This class will consist primarily of class roundtable discussions and some didactic presentations. Canvas will provide students with video lectures, content to supplement discussions, details regarding assignment expectations and grading criteria/rubrics and serve to assist the student with applicable resources for programmatic success within the Doctor of Athletic Training Program.

COURSE LEARNING OBJECTIVES

- 1. Examine principles, execute skills used in advanced orthopedic/functional upper-extremity evaluation.
- 2. Weigh the importance of a comprehensive, evidence-based assessment in the clinical diagnosis of pathology of the upper-extremity.
- 3. Examine the principles and execute the skills used in identifying normal and abnormal anatomy on diagnostic imaging of the upper-extremity.
- 4. Search, access and critically-appraise recent published evidence regarding the diagnosis of orthopedic conditions of the upper-extremity.

Course Policies

ATTENDANCE & PARTICIPATION POLICY

Attendance is mandatory. Students must attend class to successfully reach the learning outcomes for the course. Please notify the instructor via email regarding absences at least 24 hours prior to the class. University <u>guidelines</u> will determine excused vs. unexcused for the absence.

Critical-Thinking Questions and Participation: Each student, as part of his/her participation, is expected to ask questions. Insightful questions will be monitored during the year and contribute to participation grade. In addition, attending class, contributing to class, and useful information provided during class will be counted toward your participation grade. Any class period listed as "discussion", requires prior review of posted content to facilitate a valuable learning experience. Failure to come to class "prepared" creates an ineffective environment for valuable exchange of information. The instructor will use the rubric in the table below to assign participation points during discussion sessions (see dates within the course schedule listed as "discussion").

F 11 .	10 pts	Defines, describes, and illustrates concepts
Excellent		Explains, assesses, and criticizes ideas
Dei		Demonstrates preparation and reading of assignments
G 1	8 pts	Defines, describes, and illustrates concepts
Good		Explains, assesses, and criticizes ideas
		Evidence of reading assignments, but not fully prepared
_ 11	6 pts	Defines, describes, and illustrates concepts
Reasonable		Explains, assesses, or criticize some ideas
		Evidence of incomplete reading of assignments and preparation
-	4 pts	Defines and describes some concepts
Basic		Explains but cannot assess and criticize ideas
		Clearly unprepared and lacking evidence of reading assignments
D 100	2 pts	Defines and describes some concepts
Bare Minimum		Unable to explain, assess, or criticize ideas
		Clearly unprepared and lacking evidence of reading assignments
	0 pts	Refuses to engage in discussion or answer questions when asked
Unacceptable		Engaged into inappropriate behaviors (using cell phone, social media,
1		visiting irrelevant websites)
Not present		Not present

PERSONAL CONDUCT POLICY

- Please conduct yourself in a respectful and responsible manner
- Please be on time for class
- Please turn off or silence your cell phones
- Please do not participate in actions that may disrupt the class
- Please stay home if you feel unwell and notify instructor via email
- The instructor reserves the right to ask any student to leave the classroom, if the student violates any the above classroom expectations.

APPROPRIATE USE OF ARTIFICIAL INTELLIGENCE (AI) TECHNOLOGY POLICY

The UF Honor Code strictly prohibits <u>cheating</u>. Within our course, <u>cheating</u> is the use of any materials or resources prepared by another person or Entity (inclusive of generative AI tools) without the other person or Entity's express consent or without proper attribution to the other person or Entity. Additionally, the use of any materials or resources through any medium, which the instructor has not given express permission to use and that may confer an academic benefit to a student, constitutes <u>cheating</u>. In some instances, within this course, the use of AI tools will facilitate student development of skills and knowledge acquisition within the stated learning objectives. However, in other components, the use of any AI enabled tool in this course substantially compromises the student's ability to achieve the stated learning objectives. Each assignment and assessment will include a statement clarifying acceptable AI use for that respective learning assessment. When students opt to leverage AI tools to augment their submitted products, they must appropriately cite the tool(s) utilized. Further, students are accountable under the scope of the UF Student Honor Code & Conduct Code for the content of all work they submit (including the portions generated in part or whole by an external Entity—inclusive of AI). Thus, students should engage in active editorial and underwriting efforts to ensure the totality of the work submitted reflects their intentions and ethical values.

PLAGIARISM POLICY

Defined as the use and appropriation of another's work without any indication of the source and the representation of such work as the student's own. Any student, who fails to give credit for ideas, expressions or materials taken from another source, including internet sources, projects/papers submitted for another course (either intentional or unintentional), is guilty of plagiarism (please refer to the DAT Program Plagiarism Policy in the Student Handbook).

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DEPARTMENT OF APPLIED PHYSIOLOGY & KINESIOLOGY ADMINISTRATORS

The Athletic Training Program supports an inclusive learning environment and promotes diversity of thoughts, perspectives, and experiences. We value critical reasoning, evidence-based arguments, and self-reflection to support the growth of each student. Please refer to the Doctor of Athletic Training Program Policies and Procedures Manual (Canvas) for additional information. For suggestions or concerns related to APK courses or programming, please reach out to any of the following:

- Dr. David Vaillancourt (he/him), APK Department Chair, vcourt@ufl.edu
- Dr. Demetra Christou (she/her), APK Department Vice Chair, ddchristou@hhp.ufl.edu
- Dr. Steve Coombes (he/him), APK Graduate Coordinator, rachaelseidler@ufl.edu
- Dr. Anna Gardner (she/her), APK Undergraduate Coordinator, akgardner@ufl.edu

EXAMINATION & MAKE-UP POLICY

Written examinations will be administered via Canvas and will range in points from 75 – 300 and include a variety of question formats (e.g., multiple choice, select all that apply, matching and rank order). Each examination will include a practical portion that will include palpations, special tests, and diagnostic imaging. Practical portions will include a time limit of 10 to 20 minutes. There will be no make-up examinations unless exceptional conditions occur (as defined in the <u>University of Florida Catalog</u>). Prior permission from the professor is required.

A student experiencing an illness should visit the UF Student Health Care Center or their preferred healthcare provider to seek medical advice and obtain documentation. If you have an illness, family emergency or death, please contact the Dean of Students Office and follow the DSO Care Team procedures for documentation and

submission of a request for make-up assignment. The DSO will contact the instructor. Do not provide any documentation to the instructor regarding illness or family emergency; this is your personal and protected information. The DSO is qualified to receive and verify the documents you provide. The instructor will follow the recommendations from the DSO. 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.

There will be a time limit for each examination. Examinations will evaluate your understanding of material from lecture, text, and other supplemental material provided. Examinations may be administered via e-learning using lock-down browser or additional proctoring method. You should visit the website (Links to an external site) and download "Lock Down Browser" for either Windows or MAC. It may take 5-10 minutes to download so please complete the process prior to accessing an examination. As a reminder, please be sure to have a secure internet access when taking examinations - do not use a Wi-Fi access, as this is not a stable and consistent option. For MAC users, Safari is not a compatible internet browser with Canvas - please use either Internet Explorer, Google Chrome, or Firefox (version 10 or 12 - not version 11) when accessing the e-learning system. If you have issues during an examination, please call the help desk 352-392-4357. You should complete examinations during Help Desk hours so you will have access to assistance if needed. If you have an issue during a quiz/examination, please email the instructor once you have submitted the examination. Access to examinations after submission is restricted, but you will see the grade and it will be posted in the course gradebook. 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.

Quizzes: Quizzes will assess learning progress from lecture material and assigned readings. There will be a time limit for each quiz. To ensure that you are reading the assigned material, the quizzes may be both announced and unannounced. Quizzes will range from 1-25 points and include a variety of question formats (e.g., multiple choice, select all that apply, matching and rank order). For quizzes administered in e-Learning you may use notes only upon request of the instructor. You should employ examination best practices (stated above) for e-Learning quizzes. There will be no make-ups for missed quizzes (showing up late, etc.), unless exceptional conditions occur as defined in the University of Florida Undergraduate Catalog. Please see this <u>link</u> for more information.

GRADING

Letter Grade	Grade Points	Percentage
A	4.00	92 - 100
A-	3.67	89 - 91
B+	3.33	87 - 88
В	3.00	82 - 86
B-	2.67	79 - 81
C+	2.33	77 - 78
С	2.00	72 - 76
C-	1.67	69 - 71
D+	1.33	67 - 68
D	1.00	62 - 66
D-	0.67	60 - 61
Е	0.00	Below 60

Item	Percentage
Canvas Exams (2)	40%
Practical Exams (2)	18%
Clinical Diagnosis Presentation (1-2)	22%
Quizzes (11-20)	16%
Critical-Thinking Questions and	4%
Participation (13)	
Total	100%

More detailed information regarding current UF grading policies can be found here.

ASSIGNMENTS & PROJECTS

Assignments/projects are to be uploaded prior to the onset of class on the date assigned to them. Late assignments/projects may not be accepted. However, we understand that different life events happen. If an assignment or project needs to be turned in late to ensure quality work and accommodate any life events you may be experiencing, please communicate this with Dr. Tripp, and the TAs. If you are traveling for a clinical-sanctioned event, your assignment/project remains due prior to the onset of class on the date assigned to them.

You will complete the following Assignments/Projects throughout the semester:

Clinical Diagnosis Presentations: The professor will distribute Clinical Diagnosis topic assignments to each student during the first class meeting. Assignments include a list of pathologies and special tests. Due dates correspond with individual topics as posted on the course schedule.

Literature Search and Critical Appraisals: Students complete 2 Critical Appraisal Videos (QUADAS or PRISMA) on studies included in your search results – studies that do not have QUADAS/PRISMA scores and matter in terms of decision-making.

Clinical Diagnosis Presentation Rubric:

Criteria	Points	
Email Dr. Tripp - Email Dr. Tripp your PubMed searches (consider emailing them to yourself from		
PubMed and then on to Dr. Tripp); Pathology or Special Test AND (sensitivity OR specificity OR		
likelihood ratio); limit 2010-current (due 10 days in advance)		
Email Dr. Tripp and upload - Excel data for each Pathology and Special Test (Sens, Spec, +/-LRs) with	16	
references (due 10 days in advance)	10	
Email Dr. Tripp article for class reading (PRN to describe new special test) (due 10 days in advance)		
Upload final PowerPoint; make all suggested changes; include all videos (due 5 days in advance)		
Upload your hand-out sheet combined for all tests presented with 'Rule In' and 'Rule Out' columns		
(email or print for classmates, print copies for TAs and Dr. Tripp) (due 5 days in advance)		
Record videos of you performing each test (keep camera fixed; use tripod/stand); videos should auto-		
play in PowerPoint; upload YouTube into a playlist titled for week's topic (submit link to playlist)		
Delivery of Presentation		
Update/Revise Eval Sheet (due review day)		
Total	100	

Literature Search and Critical Appraisals Rubric:

Criteria		
Search terms and results are appropriate		
Correct study design checklist employed		
Checklist items are interpreted and presented appropriately		
PowerPoint quality		
Video and narration quality		
Video is within time restrictions (5 min. for a single study; 8 min. for SR or M-A)		
A pdf of the article is included		
Total	100	

Weekly Course Schedule

The course progression will tentatively follow the schedule below:

Week	Date	Topics	Assignments
1	8-26	Overview of Syllabus & Discuss Projects	Syllabus Quiz; Discussion (Critical Thinking Questions & Participation)
2	9-2	Evidence-based Clinical Exam	Week 2 Quiz; Discussion (CTQP)
3	9-9	Palpation, MMT, ROM & Ch 17	Week 3 Quiz; Discussion (CTQP)
4	9-16	Scapular Kinematics & Assessment	Week 4 Quiz; Discussion (CTQP)
5	9-23	Rotator Cuff & Impingement	Week 5 Quiz; Discussion (CTQP)
6	9-30	Glenohumeral Labrum	Week 6 Quiz; Discussion (CTQP)
7	10-7	Glenohumeral Instability	Week 7 Quiz; Discussion (CTQP)
8	10-14	Mid-Term Review	Discussion (CTQP); Update/Revise Eval Sheet
9	10-21	Written Exam I, Practical Exam	
10	10-28	AC & SC Joint	Week 10 Quiz; Discussion (CTQP)
11	11-4	Elbow	Week 11 Quiz; Discussion (CTQP)
12	11-11	Wrist & Hand	Week 12 Quiz; Discussion (CTQP)
13	11-18	Neurovascular	Week 13 Quiz; Discussion (CTQP)
14	12-2	Final Review	Update/Revise Eval Sheets
15	12-9	Written Exam I, Practical Exam	

University Policies

University Academic Policies, and Academic, and Campus Health and Wellness Resources are available here.