

University of Florida College of Health and Human Performance Department of Applied Physiology & Kinesiology Doctor of Athletic Training Program

Fall 2021 Course Syllabus | Last Date Revised: 8/8/2021

COURSE INFORMATION

ATR 7229c: Diagnostic Imaging for Athletic Trainers (3 credits) August 23, 2020-December 9, 2020 Meeting Time: Tuesdays, 10:40 AM-1:40 PM Meeting Location: Yon Hall 11

INSTRUCTOR

Dr. Brady L. Tripp, LAT, ATC Clinical Associate Professor Director, Doctor of Athletic Training Program Office Location: 148 FLG Office Phone: 352-294-1725 Email: trippb@ufl.edu Office Hours: Wednesdays 2:00-4:00 and by appointment.

COURSE DESCRIPTION

Provides Athletic Trainers background information on the physics, physiology, appropriate use and appraisal of diagnostic imaging techniques used in sports medicine including: radiography, magnetic resonance imaging, ultrasonography and nuclear medicine. Athletic Trainers develop skills interpreting diagnostic imaging and analyze the principles and procedures used in each technique. *Pre-requisite: Admission into the Doctor of Athletic Training program.*

LEARNING OUTCOMES

- 1. Identify, compare, and contrast the physics and physiology behind various diagnostic imaging techniques
- 2. Evaluate normal and abnormal anatomy or physiology on various diagnostic imaging techniques
- 3. Evaluate pathologic anatomy or physiology associated with conditions commonly sustained by the physically-active population
- 4. Critically assess the published evidence evaluating the diagnostic value of imaging used in sports medicine

REQUIRED TEXTS AND MATERIALS

Textbook	ISBN
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 REQUIREMENTS AND POLICIES

Teaching Strategies: Course material will be presented through in-person and video lectures, online materials and interactive workshop formats with 3.0 contact hours per week. This class will consist primarily of 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 DAT Program.

Examinations: Written exams 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 exam will include a practical portion that will include interpreting diagnostic imaging and employing diagnostic ultrasound. Practical portions will include a time limit of 10 to 20 minutes. There will be NO make-up exams unless exceptional conditions occur (as defined in the <u>University of Florida Catalog</u>). Prior permission from the professor is required. There will be a time limit for each written exam. Exams will evaluate the understanding of material from lecture, text, and other supplemental material provided. Please be sure to have a secure internet access when taking exams - 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 11) when accessing the Canvas.

Quizzes: Quizzes will assess learning progress from lecture material and assigned readings. There will be a time limit for each quiz. Quizzes will be open on Canvas each class period (aside from review and exam dates) after the professor has addressed all student questions. Quizzes will range from 1-35 points and include a variety of question formats (e.g., multiple choice, select all that apply, matching and rank order). For quizzes administered in Canvas students may use notes if permitted by the professor. Students should employ best practices (stated above). There will be NO make-ups for missed quizzes (showing up late, etc.), unless exceptional conditions occur as defined in the <u>University of Florida Catalog</u>.

Critical Appraisals: Dr. Tripp will assign topics in advance. Students will search published literature for evidence quantifying the diagnostic value of an assigned imaging technique on an assigned pathology. Students complete a critical appraisal of an appropriate study (highest level of evidence and most applicable) using the appropriate checklist (QUADAS primarily, for others, see <u>How to Critically Appraise an Article</u>). Students create a narrated PowerPoint presentation detailing their search strategy, results and critical appraisal. Assignments are to be submitted on Canvas prior to the onset of class. LATE ASSIGNMENTS ARE NOT ACCEPTED!

Literature Search Results and Critical Appraisal Rubric:

Criteria	Points
Search terms and results are appropriate	7
Correct study design checklist employed	7
Checklist items are interpreted and presented appropriately	48
erPoint quality; including a table of best evidence from 2-4 of the highest 14	
quality studies (including- and in addition to, the article you review)	14
Video and narration quality	14
Video is within time restrictions (5 min. for a single study; 8 min. for SR or M-A)	7
A pdf of the article is included	3
Total	100

Diagnostic Ultrasound Demonstration: Dr. Tripp will assign topics in advance. Students create a narrated PowerPoint/video demonstrating themselves identifying an anatomic structure using diagnostic ultrasound. Videos should be under 3 minutes in length and suitable for training classmates to perform the same technique. Students demonstrate the technique during class.

Attendance: Throughout the semester, various speakers present information to the class. Your attendance at these presentations is expected; written notification of an absence (i.e., email) prior to the class is required for an absence to be excused (see university regulations as stated above). All students are required to attend lectures (*please review the academic absence policy in the DAT Program Policies and Procedures Manual*). Requirements for class attendance and make-up exams, assignments, and other work are consistent with <u>university policies</u> found in the online catalog.

Student Conduct Policy:

- All students are expected to conduct themselves in a respectful and responsible manner
- All students are expected to be on time for class
- All students are expected to turn off or silence their cell phones
- All students are expected to not participate in actions that may disrupt the class
- The instructor reserves the right to ask any student to leave the classroom, if the student violates any the above class procedures

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").

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

Plagiarism: 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*).

COURSE SCHEDULE (SUBJECT TO MODIFICATION)

The course progression will tentatively follow the schedule below:

Week	Date	Topics	Assignments
1	8-24	Overview of <u>Syllabus</u> and Materials; <u>Radiography</u>	<u>Syllabus Quiz</u> ; <u>Quiz-1</u> ; Discussion (Critical Thinking Questions and Participation)
2	8-31	Magnetic Resonance	Critical Appraisal; <u>Quiz-2</u> ; Discussion (CTQP)
3	9-7	<u>Ultrasonography</u>	Critical Appraisal; <u>Quiz-3</u> ; Discussion (CTQP)
4	9-14	<u>Nuclear Medicine: Bone</u> <u>Scintigraphy, SPECT, PET</u>	Critical Appraisal; <u>Quiz-4</u> ; Discussion (CTQP)
5	9-21	<u>SC and Shoulder</u>	Critical Appraisal; <u>Quiz-5;</u> Discussion (CTQP)
6	9-28	<u>Elbow</u>	Critical Appraisal; <u>Quiz-6</u> ; Discussion (CTQP)
7	10-5	Written Exam I and Practical Exam I	
8	10-12	<u>Forearm, Wrist and Hand</u>	Critical Appraisal; <u>Quiz-7</u> ; Discussion (CTQP)
9	10-19	Foot and Ankle	Critical Appraisal; Quiz-8; Discussion (CTQP)
10	10-26	Knee	Critical Appraisal; <u>Quiz-9</u> ; Discussion (CTQP)
11	11-2	Hip and Pelvis	Critical Appraisal; <u>Quiz-10</u> ; Discussion (CTQP)
12	11-9	Thoracic and Lumbar Spine	Critical Appraisal; <u>Quiz-11</u> ; Discussion (CTQP)
13	11-16	<u>Cervical Spine</u>	Critical Appraisal; <u>Quiz-12</u> ; Discussion (CTQP)
14	11-23	TBD	
15	11-30	<u>Face and Mandibular /</u> <u>Review</u>	Critical Appraisal; <u>Quiz-13</u> ; Discussion (CTQP)
16	12-7	Written Exam II and Practical Exam II	

CTQP, Critical Thinking Questions and Participation

GRADING CRITERIA

Letter Grade	Grade Points	Percentage	Canvas Written Exams (2) Practical Exams (2) Quizzes (13-18) Critical Appraisals (4-5) Diagnostic Ultrasound Demonstration (1) <u>Critical-Thinking Questions and Participation (13)</u>
Α	4.00	92 - 100	
A-	3.67	89 - 91	
B+	3.33	87 - 88	
В	3.00	82 - 86	
B-	2.67	79 - 81	TOTAL
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	
Ε	0.00	Below 60	

COLLEGE/UNIVERSITY-WIDE POLICIES

Academic Honesty: : UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The <u>Honor Code</u> specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult the instructor.

Academic Assistance and Student Services: Students who are in need of academic, career, or personal counseling services are encouraged to see the <u>academic assistance website</u> for further information on available services.

ADA Policy: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting their <u>Get</u> <u>Started</u> page. 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.

Campus Resources: U Matter, We Care: Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact <u>umatter@ufl.edu</u>; a nighttime and weekend crisis counselor is available by phone at 352.392.1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

University Police Department: 392.1111 or 9-1-1 for emergencies

34% 14% 20% 22% 6% 4%

100%

<u>Counseling and Wellness Center</u>: 352.392.1575; *Sexual Assault Recovery Services (SARS)* Student Health Care Center, 352.392.1161.

Career Resource Center: Reitz Union, 352.392.1601

Cell Phone/Text Messaging Policy: Students will not engage in text messaging or access their cellular telephones during class time. Faculty will award special considerations at his discretion.

Confidentiality: The University ensures the confidentiality of student educational records in accordance with State University System rules, state statutes and <u>FERPA</u>, the Family Educational Rights and Privacy Act of 1974, as amended, also known as the <u>Buckley Amendment</u>.

Course Grading Policy: Students will earn their course grade based on completion of coursework as outlined in the Grading Criteria listed above. Percentage calculations are rounded up at ".6 or above" and rounded down at ".5 or below". For more information regarding Grade Point Averages, Grade Values, etc. please visit the University registrar <u>website</u>.

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 <u>here</u>. 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 <u>here</u>. Summaries of course evaluation results are available to students <u>here</u>.

Email and E-Learning Policy: Students are required to check their University of Florida email and E-Learning Course account daily. Dissemination of reminders and course material may occur via email or through announcements in Canvas; it is the student's responsibility to read and respond (if appropriate). <u>E-learning Help Desk</u>: Technical support: 352.392.4357 (select option 2) or e-mail to Learning-support@ufl.edu

E-Learning Identity and Preferences: It is important to the learning environment that you feel welcome and safe in this class; and that you are comfortable participating in class discussions and communicating with me on any issues related to the class. If your preferred name is not the name listed on the official University of Florida roster, please let me know as soon as possible. I would like to acknowledge your preferred name, and pronouns that reflect your identity. Please let me know how you would like to be addressed in class, if your name and pronouns are not reflected by your University of Florida official roster name. I welcome you to the class and look forward to a rewarding learning adventure together. 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 University of Florida 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 University of Florida records.

Inclusion, Diversity, Equity, and Accessibility (IDEA) Information

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 the Non-Discrimination, Equity, and Diversity Policy. For suggestions or concerns related to IDEA, please reach out to any of the following:

- Dr. Linda Nguyen, APK IDEA Liaison, <u>linda.nguyen@hhp.ufl.edu</u>
- Dr. Rachael Seidler, APK Graduate Coordinator, <u>rachaelseidler@ufl.edu</u>
- Dr. Joslyn Ahlgren, APK Undergraduate Coordinator, jahlgren@ufl.edu

Last Day to Withdraw: In order to withdraw from a course it is not sufficient simply to stop attending class or to inform the instructor of your intention to withdraw. In accordance with college policy, contact your adviser to begin the withdrawal process. To view the **last day for withdrawal see <u>here</u>**.

Library Resources Support

Privacy: Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or 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. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Student Responsibility for Course Prerequisites: Students are responsible to have satisfied all published prerequisites for this class. Please review the prerequisites and discuss any questions with your instructor and/or your academic advisor.

Student Complaints Process

Teaching Center: General study skills and tutoring; Broward Hall, 352.392.2010 or 352.392.6420.

Writing Studio: Formatting and writing papers assistance