

**College of PHHP/Department of Physical Therapy – Fall Semester, Year 2**

**Course Title:** PHT 6070 Functional Radiology and Diagnostic Imaging for Physical Therapists

**Course Instructor:** Matt Walser, PA-C, MPAS, ATC [walsemp@ortho.ufl.edu](mailto:walsemp@ortho.ufl.edu)

**Office hours:** by appointment via email or personal request

**Credit hours:** 3 credits

**Clock hours:** 1 lecture hour x 9 weeks, 1.5 lecture hours x 2 weeks

**I. Course Description:**

The purpose of this course is to provide the doctoral level physical therapy student with an intensive study of radiology. By the end of the course, the student will understand the basic interpretative techniques in the many different areas of radiology. This course will emphasize the systematic approach for radiographic interpretation as well as interpretation of various radiology reports.

**II. General Objectives:**

1. Understand the importance of imaging technology used in musculoskeletal care.
2. Discuss the differences and capabilities of radiography, MRI, CT, bone scintigraphy, and ultrasonography.
3. Understand the importance of communicating with other healthcare providers regarding radiological studies.
4. Discuss the importance of understanding a radiological report.
5. Define terms commonly used in diagnostic radiography, MRI, CT, bone scintigraphy, and ultrasonography.
6. Describe the basic fundamental physical principles of radiography, MRI, CT, bone scintigraphy, and ultrasonography.
7. List basic positions utilized for radiography.
8. Identify basic anatomy in routine radiography, MRI, CT, bone scintigraphy, and ultrasonography.
9. Discuss the three types of densities usually seen on a radiograph and their significance.
10. Discuss the importance of correlating the study with the patient's history and physical exam.
11. Understand the importance of radiological findings in regards to formulating patient treatment plans.
12. Describe and understand the different patterns of pathologic processes; including fractures, sprains, strains, effusions, stress reactions, DVT.
13. Recognize the genetic anomalies commonly seen on radiographs.
14. Interpret routine radiographs and identify abnormalities.

### **III. Teaching Methods:**

1. Lectures
2. Case studies
3. Textbook (required): Fundamentals of Musculoskeletal Imaging, 3<sup>rd</sup> Ed. McKinnis, Lynn.

### **IV. Exams:**

There will be 9 exams over the duration of this course. Each exam will be administered on Sakai. If any exam is completed after the deadline, it will not be graded.

Exam subjects:

- Foot/Ankle – 1
- Knee – 2
- Hip – 1
- T/L spine – 1
- C spine – 1
- Shoulder – 1
- Elbow/Wrist/hand/fingers – 1
- Final exam – 1

Optional case studies: There will be 5 optional case studies offered.

- Shoulder – 1
- Knee – 2
- Hip – 1
- Misc. – 1

If a student has a question regarding the case study, he/she may ask via EMAIL (see above). I check emails frequently during the day, and will check VERY frequently the day and night before questions are due.

### **V. Make-up Exams:**

In extraordinary circumstances it may be possible to take an exam early or late. If for any reason you are unable to attend an exam at the last minute, you must notify the instructor as soon as possible. Personal issues with respect to exams will be handled on an individual basis.

## VI. Course Schedule:

Day	Date	Time	Topic	Required Readings
Tues	May 21	5:30 – 6:30	Introduction to Functional Radiology I	Ch. 1-3
Tues	May 28	5:30 – 6:30	Introduction to Functional Radiology II	Ch. 1-4
Tues	June 4	5:30 – 6:30	Foot and Ankle	Ch. 11
Tues	June 11	8:00am	EXAM DUE (FOOT/ANKLE)	
Tues	June 18	5:30 – 6:30	Knee	Ch. 10
Tues	June 25	8:00am	EXAM DUE (KNEE #1)	
Tues	July 2	8:00am	EXAM DUE (KNEE #2)	
Tues	TBA	5:30 – 6:30	Hip	Ch. 9
Tues	TBA	8:00am	EXAM DUE (HIP)	
Tues	TBA	5:30 – 6:30	Thoracic/Lumbar Spine, SI Joint	Ch. 7-8
Tues	TBA	8:00am	EXAM DUE (T/L SPINE)	
Tues	TBA	5:30 – 6:30	Cervical Spine	Ch. 5
Tues	TBA	8:00am	EXAM DUE (C SPINE)	
Tues	TBA	5:30 – 6:30	Shoulder	Ch. 12
Tues	TBA	8:00am	EXAM DUE (SHLD)	
Tues	TBA	5:30 – 6:30	Soft Tissue/Non-Joint Radiology	
Tues	TBA	5:00 - 6:30	Elbow/Wrist/Hand/Fingers	Ch. 13-14
Tues	TBA	8:00am	EXAM DUE (EWHF)	
Tues	TBA	5:00 – 6:30	Review/ Recap/ Misc/Etc...	
Tues	TBA	8:03am	FINAL EXAM	

\*\*\* All days, times, subject matter is subject to change.

If a conflict between Radiology and another class occurs, or if multiple exams are on the same day, the class representative will bring this to my attention and we will resolve the issue.

## VII. Testing and Grading:

Students' performance will be assessed by case studies. Ten case studies worth 50pts = 500 possible points. Optional case studies will be for student benefit only.

### Grading Scale:

Grade Scale	Grade	Minimum Points Required
93 - 100	A (4.0)	465
90 - 92	A- (3.67)	450
87 - 89	B+ (3.33)	435
83 - 86	B (3.0)	415
80 - 82	B- (2.67)	400
70 - 79	C (2.0)	350
60 - 69	D (1.0)	300
<60	E (0.0)	299

## VIII. Attendance:

**Attendance is mandatory.** Please contact the instructors as soon as possible if you are unable to attend class for any reason. Personal issues with respect to class attendance or fulfillment of course requirements will be handled on an individual basis.

## IX. Academic Honesty:

In this professional program we are particularly sensitive to students submitting independent work and to using complete and accurate referencing in complying with the University of Florida Rules - 6CI-4.017 Student Affairs: Academic Honesty Guidelines. Further details regarding the University of Florida honesty policy is available at: <http://www.dso.ufl.edu/judicial/procedures/academicguide.php> and in your student handbook. All students are required to abide by the Academic Honesty Guidelines, the following pledge has been accepted by the University and is expected of all students: **"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity"**. 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."**

## X. Accommodations for Students with Disabilities:

Students requesting classroom accommodations must first register with the Dean of Students Office. The Dean of Students Office will then provide documentation to the student who must then present the documentation to the course instructor when requesting the accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework.

## **XI. Counseling and Student Health:**

Students may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the University of Florida Counseling Center, 352-392-1575, or Student Mental Health Services, 352-392-1171. Visit their web sites for more information:

<http://www.counsel.ufl.edu/> or <http://www.health.ufl.edu/shcc/smhs/index.htm#urgent>

The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services, including primary care, women's health care, immunizations, mental health care, and pharmacy services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: [www.health.ufl.edu/shcc](http://www.health.ufl.edu/shcc) Crisis intervention is always available 24/7 from: Alachua County Crisis Center: (352) 264-6789. *BUT – Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone - do not be afraid to ask for assistance.*