



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Physical Therapy Department

P.T311 Medical Imaging&..... - JNQF Level: 7

First Semester 2023-2024

Course Catalog

2 Credit Hours. Understanding the principles of interpreting medical imaging. The diagnostic tools including x-ray, CT- scan, MRI, fMRI, nerve conduction studies, EMG, EEG, MEG, PET, and NIRS will be covered.

Teaching Method: Blended

Text Book

Title	Diagnostic Imaging for Physical Therapists
Author(s)	James Swain Kenneth Bush Juliette Brosing
Edition	1st Edition
Short Name	Ref 1
Other Information	2009

Instructor

Name	Dr. Mikhled Maayah
Office Location	Head of Department Office
Office Hours	
Email	mikhledm@just.edu.jo

Class Schedule & Room

Section 1:
 Lecture Time: Sun : 14:30 - 15:30
 Room: M4201

Prerequisites

Line Number	Course Name	Prerequisite Type
1112030	P.T203 Musculoskeletal Anatomy (Lab)	Prerequisite / Study
102261	MED226 Neuroscience (1)	Prerequisite / Study

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Course Introduction and X-rays ABCS	From Ref 1
Week 2	X-rays for Cervical spine	From Ref 1
Week 3	X-rays Lumber spine	From Ref 1
Week 4	X-rays Shoulder joint	From Ref 1
Week 5	X-rays for wrist & Hand	From Ref 1
Week 6	X-rays Pelvic and knee joint	From Ref 1
Week 7	X rays ? Leg, Ankle, Foot	From Ref 1
Week 8	MRI Introduction and MRI for Brain (lateral view)	From Ref 1
Weeks 9, 10	Brain MRI for Sagittal, Frontal, and Superior views	From Ref 1
Weeks 11, 12	MRI for Spine, pelvic, Knee and foot	From Ref 1
Week 13	NCS and EMG	From Ref 1

Weeks 14, 15	Brain Mapping	From Ref 1
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Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Develop a comprehensive vocabulary including terminology pertinent to various medical imaging modalities and diagnostic tools utilized in physical therapy practice. [1PLO1 -K1] [1L7K1]	25%	
Differentiate between normal anatomical structures and identify pathological conditions depicted in x-ray imaging, correlating findings with clinical presentations. [1PLO1 -K1] [1L7S1]	25%	
Interpret normal anatomical structures and elucidate pathological findings evident in MRI imaging, as well as other electrophysiological and hemodynamic imaging techniques, within the context of physical therapy assessment and treatment planning. [1PLO4-K4] [1L7S2]	25%	
Integrate foundational knowledge of medical imaging with differential diagnosis principles to analyze and apply diagnostic findings in clinical scenarios, promoting effective decision-making and patient-centered care. [1PLO1 -K1] [1L7C4]	25%	

Relationship to Program Student Outcomes (Out of 100%)																
PLO1 -K1	PLO8- C1	PLO9- C2	PLO5- S1	PLO2- K2	PLO3- K3	PLO6- S2	PLO4- K4	PLO10- C3	PLO7- S3	MS_PLO1	MS_PLO2	MS_PLO3	MS_PLO4	MS_PLO5	MS_PLO6	MS_PLO7
75							25									

Relationship to NQF Outcomes (Out of 100%)			
L7K1	L7S1	L7S2	L7C4
25	25	25	25

Policy	
Statement on Professionalism	Professional behavior is expected of students at all times. Attitude and professional behavior are a minimum criterion for passing this class. Examples of unprofessional behavior include but are not limited to: missing classes, tardiness, lack of attention for a speaker, talking to others during the lecture, leaving a lecture before its completion without prior authorization of the instructor, working on other class material during class, and sleeping during class.
Cheating	University regulations will be applied in cases of cheating and/or plagiarism.
Attendance and Absences	No points will be counted for attendance in this class; however, attending the lectures will greatly enhance your grade. The student is responsible for any information discussed in the lecture sessions. It is imperative to attend all classes! University regulations will be applied. Students are not allowed to be absent for more than 20% of lectures for any reason or excuse. If a student exceeds the absence limit, he or she will not be allowed to sit for future course exams. (Please review university regulation for more details).
Make-up Exam	Make-up exams are entitled to students who miss the exam with accepted legal or medical excuse endorsed by the instructor within 24 hours after the scheduled exam (Please review university regulation for more details).
Feedback	Concerns, complaints, questions, and/or feedback are appreciated and will be important for the instructor. You can contact your instructor using e- mail or during office hours.

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