



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Radiologic Technology Department

RA100 Introduction To Radiologic Technology

Second Semester 2023-2024

Course Catalog

1 Credit Hours. This course introduces the student to the radiologic science from clinical and physical aspects. It provides basic knowledge related to the role of radiologic technologist, administrative process in the radiology department, terminology, and patient care. In addition, this course provides the physical principal of different imaging

Teaching Method: On Campus

Text Book

Title	Radiologic Science for Technologists: Physics, Biology, and Protection
Author(s)	Stewart C
Edition	10th Edition
Short Name	1
Other Information	

Instructor

Name	Prof. Khalaf Al-Masaid
Office Location	PH3 L1
Office Hours	
Email	khalaf@just.edu.jo

Class Schedule & Room

Section 1:
Lecture Time: Mon : 11:30 - 12:30
Room: M4202

Teaching Assistant

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Introduction to radiation physics Terminology	From 1
Week 2	The x-ray department Introduction to radiographs	From 1
Week 3	Patient care	From 1
Week 4	X-rays and their production	From 1
Week 5	Diagnostic applications for x-ray , advantages and disadvantages of diagnostic x- ray and Ultrasound and its production	From 1
Week 6	The interaction of ultrasound with tissue	From 1
Week 7	Ultrasound scanning, the A-mode, B-mode Image clarity and applications of pulse-echo imaging	From 1
Week 8	Biological effects of ultrasound	From 1
Week 9	Some basic radioactivity, emission of artificial radionuclides, radiopharmaceuticals and radionuclide imaging	From 1
Week 10	Advantages and disadvantages of radionuclide imaging.	From 1
Week 11	Nuclear magnetic resonance (NMR) localization of the signal.	From 1
Week 12	Factors influencing signal	From 1
Week 13	Intensity Instrumentation and equipment Applications of MRI From	From 1
Week 14	MRI safety	From 1
Week 15	Advantages and disadvantages of MRI Radiological protection	From 1
Week 16	Revision	From 1

Relationship to Program Student Outcomes (Out of 100%)

PLO B1	PLO B2	PLO B3	PLO B4	PLO B5	PLO B6	PLO B7	PLO M1	PLO M2	PLO M3	PLO M4	PLO M5	PLO M6

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