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

RA212 Digital Image Processing And Analysis

Second Semester 2023-2024

Course Catalog
1 Credit Hours. This course provides a sound understanding of the physics of Digital Radiography. It explains the principles of digital images acquisition, processing and display.
Teaching Method: Blended

Text Book	
Title	Radiologic Science for Technologists.
Author(s)	Bushong S.
Edition	8th Edition
Short Name	1
Other Information	

Instructor	
Name	**Prof. Fedda Alzoubi**
Office Location	PH3 L1
Office Hours	
Email	fedda@just.edu.jo

Class Schedule & Room
Section 1: Lecture Time: Sun : 09:30 - 10:30 Room: HOSPITAL

Teaching Assistant
Rasha Elshayib(Section 1)

Tentative List of Topics Covered		
Weeks	**Topic**	**References**
Week 1	Introduction to digital x-ray imaging	From **1**
Week 2	Physical principles of digital radiography	From **1**
Week 3	Computed radiography image plates and reader units	From **1**
Week 4	Data normalization	From **1**
Week 5	Digital image enhancement	From **1**
Week 6	Digital image display and archival	From **1**
Week 7	Image quality	From **1**
Week 8	Advances in digital radiology	From **1**
Week 9	Advances in digital images processing	From **1**
Week 10	Differences in digital systems	From **1**
Week 11	CCD sensor based digital radiography.	From **1**
Week 12	Solid-state flat panel digital radiography	From **1**
Week 13	Indirect and direct digital radiography detectors 1	From **1**
Week 14	Indirect and direct digital radiography detectors 2	From **1**
Week 15	Indirect and direct digital radiography detectors 3	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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