



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

RA469 Computed Tomography Lab

First Semester 2023-2024

**Course Catalog**

1 Credit Hours. The CT lab course helps provide a practical aspect of the CT course. This course introduces students to the CT scanner, its components and functions. Students will get familiar with different CT scanner generations, types and types of detectors. Students will review CM preparations, indications and contraindications, side effects, and medications present in the CT room to deal with CM reactions. The students will get into details of patient preparation, scanning protocol, CM of each of the following body areas: head, spine, chest, abdomen, pelvis, upper and lower extremities. They will learn the indications and contraindications of each protocol, in addition to learning the specific anatomy and most common pathologies.

**Teaching Method:** On Campus

**Text Book**

<b>Title</b>	Computed Tomography for Technologists
<b>Author(s)</b>	Louis E. Romans
<b>Edition</b>	2nd Edition
<b>Short Name</b>	Ref # 1
<b>Other Information</b>	

**Instructor**

Name	Dr. Badera Almohammad
Office Location	-
Office Hours	
Email	balmohammad@just.edu.jo

**Class Schedule & Room**

Section 1:

Lecture Time: Thu : 08:30 - 10:30

Room: LAB

Section 2:

Lecture Time: Thu : 10:30 - 12:30

Room: LAB

Section 3:

Lecture Time: Thu : 12:30 - 14:30

Room: LAB

Section 4:

Lecture Time: Thu : 14:30 - 16:30

Room: LAB

**Teaching Assistant**

Rasha Elshayib(Sections 1, 2, 3, 4)

**Tentative List of Topics Covered**

<b>Weeks</b>	<b>Topic</b>	<b>References</b>
Week 1	Introduction to CT	
Week 2	CT terminology	
Week 3	CT scanner components	
Week 4	CT scanner detectors	
Week 5	CT Scanner generations	
Week 6	Advanced CT scanners	
Week 7	Contrast Media 1	
Week 8	Contrast Media 2	
Week 9	CT procedures : Brain	
Week 10	CT procedures : Chest	
Week 11	CT procedures : Abdomen	
Week 12	CT procedures : Pelvis	
Week 13	CT procedures : Spine	
Week 14	CT procedures : Musculoskeletal	
Week 15	CT procedures : Extrimities	From <b>Ref # 1</b>
Week 16	Revision	

<b>Mapping of Course Outcomes to Program Outcomes</b>	<b>Course Outcome Weight (Out of 100%)</b>	<b>Assessment method</b>
Learning the concepts of CT scanning and the physics and equipment behind CT	20%	
Learn how the CT images are acquired, transmitted, displayed, manipulated and stored	10%	
Learn to perform the following procedures head, spine, chest, abdomen, pelvis and others	30%	
Learn how to perform windowing and image manipulation.	20%	
Get familiar with advanced CT techniques	10%	
Learn the indications and contraindications for each procedure and CM	10%	

<b>Relationship to Program Student Outcomes (Out of 100%)</b>												
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

Date Printed: 2024-02-18