



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

RA453 Vascular Radiography - JNQF Level: 7

First Semester 2024-2025

Course Catalog

2 Credit Hours. This course is an introduction to catheter-based angiographic procedures. It covers the technological as well as the practical aspects of angiography and cardiac catheterization. It also introduces the students to the major interventional procedures. This course prepares the students to the clinical training in the fourth year of their study.

Teaching Method: On Campus

Text Book

Title	Vascular and Interventional Radiology
Author(s)	Valgi K. 2006
Edition	2nd Edition
Short Name	1
Other Information	

Instructor

Name	Dr. MOHAMMAD AYASRAH
Office Location	-
Office Hours	Sun : 10:30 - 12:30 Mon : 11:30 - 13:00 Wed : 11:30 - 13:00 Thu : 15:30 - 16:30
Email	maayasrah@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Mon, Wed : 13:00 - 14:00

Room: N4206

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Introduction to vascular imaging	From 1
Week 2	Digital fluoroscopy imaging system and digital subtraction angiography	From 1
Week 3	Pathogenesis of vascular diseases	From 1
Week 4	Pathogenesis of vascular diseases 2	From 1
Week 5	Patient evaluation and care	From 1
Week 6	Standard angiographic and interventional technique	From 1
Week 7	Standard angiographic and interventional technique 2	From 1
Week 8	Cardiac catheterization	From 1
Week 9	Peripheral angiography	From 1
Week 10	Peripheral angiography 2	From 1
Week 11	Neuroangiography 1	From 1
Week 12	Neuroangiography 2	From 1
Week 13	Visceral/abdominal Angiography 1	From 1
Week 14	Visceral/abdominal Angiography 2	From 1
Week 15	Venography	From 1
Week 16	Revision	From 1

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Identify best practices for radiation safety and minimize radiation exposure to patients, carers, family, and healthcare personnel during angiography. [1PLO B4] [1L7C2]	20%	
Collaborate effectively with other members of the healthcare team to ensure safe and effective patient care before, during and after angiographic procedures [1PLO B7] [1L7C4]	20%	

Understand and identify imaging system geometry and layout for each Angiographic examination such as source-to-image distance, the field of view, beam and image intensifier angulation, radiation shielding anti-scattered grid, image intensifier position, collimator size and other parameters [1PLO B2] [1L7K1]	20%	
Identify and perform image processing techniques, and critically analyse their advantage in diagnostic imaging and how they increase system efficacy. [1PLO B6] [1L7S3]	20%	
Identify and troubleshoot common issues and artifacts that may occur during angiographic procedures [1PLO B3] [1L7S2]	20%	

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
	20	20	20		20	20						

Relationship to NQF Outcomes (Out of 100%)				
L7K1	L7S2	L7S3	L7C2	L7C4
20	20	20	20	20

Evaluation	
Assessment Tool	Weight
mid exam	50%
final exam	50%

Date Printed: 2024-10-24