

Course Syllabus of Radiographic Technique 2

Faculty: Faculty of Medicine and Health Sciences

Department: Health Sciences

Program: Bachelor in Radiologic Technology & Medical Imaging

I. General information about the course instructor :							
Name	Dr. Amin Mohsen Amer						
Location & phone number	UST- 775948767	Sat	Sun	Mon	Tue	Wed	Thu
Email	aminalfahi@gmail.com				√		

II. General information about the course:						
1.	Course Title :	Radiographic Technique 2				
2.	Course Code and Number :	BMI311				
3.	Credit Hours :	Credit Hours				Total
		Theoretical	Seminar/Tutorial	Practical	Training	
		3	-	2	-	5
4.	Study Level and Semester:	3 rd level / 1 st semester				
5.	Pre-requisites :	BMI223				
6.	Co-requisites :	None				
7.	Program in which the course is offered:	Bachelor in Radiologic Technology & Medical Imaging				
8.	Teaching Language:	English				
9.	Instruction location:	University of Science and Technology, Sana'a, Yemen				

III. Course Description :	
<p>This course will introduce to and familiarize the student with the basic routine of radiographic positioning, exposure factors, shielding techniques, and related terminology of the pelvis, abdomen, thorax, skull and vertebral column radiography. Demonstration sessions in the x-ray unit will be conducted and actual radiographs will be viewed for analysis of proper positioning and overall image quality, related disease processes for each of exams included in this course. The teaching strategies will include lectures , intensive practice sessions in radiographic imaging lab with collaborative learning, dialogue and discussion. The students will be evaluated through report, written exam and practical exam. Radiographic technique 1 is a pre-requisite course.</p>	

عميد الكلية:
د. عبدالله المخلافي

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إدارة ضمان الجودة والاعتماد
مستعمل
APPROVED

المراجع :
د. صدام الزوفي
د. مجاهد نصار

الموصف :
أمين الفلاحي

IV. Course Aims: This course is aimed to:

1. Enhance student knowledge related to positioning and patients scanning using general radiographic system .
2. Enable student to apply appropriate radiographic examinations and exposure factors for the pelvis, abdomen, thorax, skull and vertebral column radiography
3. Improve the student skills related to radiographic anatomy of different patient positions and radiographic technique.
4. learn student the comprehensive skills of applying standards in radiographic scanning procedures based on quality assurance and radiation protection.
5. Provide student the fundamental skills to analyze and assess image quality according to the standard issues.

V. Course Intended Learning Outcomes (CILOs) :

1. Describe the comprehensive skills of standards radiographic procedures based on quality assurance and protection principles for imaging pelvis, abdomen, thorax, skull and vertebral column radiography .
2. Recognize essential skills required to improve patient care according to the patient health and psychological state .
3. Identify related anatomy in imaging on the radiographic image of pelvis, abdomen, thorax, skull and vertebral column radiography.
4. Analyze the radiographic image images according to the criteria and recognize the artifacts or limitations if occur during the general radiographic imaging process of pelvis, abdomen, thorax, skull and vertebral column radiography.
5. Correlate the radiographic image quality regarding to the QA issues and standards .
6. Operate safely the radiographic imaging modalities according to the standard manual operation (manufacturer's instructions) for pelvis, abdomen, thorax, skull and vertebral column radiography .
7. Apply the ALARA principle to protect the patients, and others during general radiographic imaging process of pelvis, abdomen, thorax, skull and vertebral column radiography.
8. Perform the QA tests and procedures to ensure optimal operation of radiographic imaging modalities .
9. Practice suitable preparation and positioning in radiographic imaging process to improve diagnosis and patient satisfaction.
10. Work independently or as a team member and effectively communicate with the teaching staff and colleagues to identify, analyze and understand emerging issues.



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VI. Course Contents				
Theoretical Aspect:				
No.	Course Topics/Units	Sub-topics	Week due	Contact Hours
1	Introduction, principles and terminology	<ul style="list-style-type: none"> principles and terminology of conventional radiographic technique 	1 st	2
2	Anatomy and positioning related to pelvis radiography	<ul style="list-style-type: none"> Introduction and anatomy review Routine and some special projections of pelvis 	2 nd	2
3	Anatomy and positioning related to abdomen radiography	<ul style="list-style-type: none"> Introduction and anatomy review Routine and some special projections of KUB, acute abdomen 	3 rd 4 th	4
4	Anatomy and positioning related to skull radiography	<ul style="list-style-type: none"> Introduction and anatomy review Routine and some special projections of skull 	5 th 6 th	4
5	Mid-term exam		7 th	2
6	Anatomy and positioning related to ribs and thorax radiography	<ul style="list-style-type: none"> Introduction and anatomy review Routine and some special projections of ribs and thorax 	8 th ,9 th	4
7	Anatomy and positioning related to the vertebral column radiography	<ul style="list-style-type: none"> Introduction and anatomy review Routine and some special projections of vertebral column 	10 th .11 th	4
8	Anatomy and positioning related to the ward and theatre radiography	<ul style="list-style-type: none"> Introduction and anatomy review some special projections of ward and theatre 	12 th	2
9	Image critique	<ul style="list-style-type: none"> Image criteria subtopic Structure shown Positioning Exposure factor CR and markers 	13 th	2
10	Normal and abnormal findings in the radiograph	<ul style="list-style-type: none"> Radiographic anatomy and pathology normal and abnormal findings in the radiograph of parts being studied in this course 	14 th	2
11	Final exam		15 th	2
Total number of weeks and hours			15	30

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:Second: Clinical Aspects			
No.	Clinical topics	Week due	Contact Hours
1	Introduction to radiographic technique lab (components, principles and safety)	1 st	2
2	Procedures of pelvis radiography demonstration	2 nd	2
3	Procedures of abdomen radiography demonstration	3 rd , 4 th	4
4	Procedures of skull radiography demonstration	5 th , 6 th	4
5	Procedures of ribs and bony thorax radiography demonstration	7 th , 8 th	4
6	Procedures of vertebral column radiography demonstration	9 th , 10 th , 11 th	6
7	Image viewing and critique	12 th , 13 th	4
8	Final exam	14 th	2
Total number of weeks and hours		14	28

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