Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Department of Allied Medical Sciences
2013-2014
Course Syllabus

Course Information	
Course Title	Central Osseous System Radiography
Course Code	RA 331
Prerequisites	RA 230
Course Website	NA
Instructor	Dr. Haytham AL Ewaidat
Office Location	
Office Phone #	26879
Office Hours	
E-mail	haewaidat@just.edu.jo
Teaching Assistant(s)	

Course Description

This course provides the student with instruction in the radiographic anatomy and positioning and to obtain basic knowledge, skills, and application of alignment of body parts, cassettes, and x-ray tube in each elementary radiographic examination correlated with patient care procedures. Emphasis will be placed on positioning terms, projections of the chest, abdomen, and pelvis, skull, facial bone, sinuses, chest, abdomen, pelvis and vertebral column.as well as corresponding radiographic analysis. A laboratory component is included. Student will be required to participate in simulation activities on each other for each of the procedures covered in this course.

Textbook	
Title	Atlas of Radiographic Positioning & Radiologic Procedures
Author(s)	Phillip W . Ballinger, Eugene D .Frank. Merrill's
Publisher	Mosby
Year	2003
Edition	3-Volume Set.
Book Website	
Other references	

Assessment		
Assessment	**Expected Due Date**	**Percentage**
First Exam		20%
Second Exam		20%
Practical	TBA	20% (10% first + 10% second)
Final Exam	TBA	40% (13% practical + 27% theory)

Course Objectives	Percentage
Describe standard positioning terms utilized in this course.	10%
Describe positioning aids, anatomy and basic views used in radiography procedures learned in this course.	20%
Given simulated clinical situations, explain the specific considerations that might be necessary to produce the required radiographs.	20%
Through role –playing, demonstrate the ability to use the appropriate general considerations in various radiographic procedures with various patient types	20%
. Evaluate images for: positioning, centering appropriates anatomy, and overall . Image quality for the procedures in this course.	30%

Teaching & Learning Methods

- Power Point lectures
- Lab

Teaching duration:

- Lectures: 2 hr/week
- Lab: 1 hr/week

Learning Outcomes	
	Reference(s) Hand-outs
1. Exercise the priorities required in daily clinical practice.	Chapter 1
2. Identify and describe the different equipment and instruments used in conventional x-ray	Chapter 5, 6
3. Critique radiographic quality and identify pertinent anatomy	Chapter 5, 6
4. Assist the radiologist in performing the different conventional examinations	Chapter 7-10
5. Read the image and identify the different anatomy and simple pathology	Chapter 7-10
6. Execute medical imaging procedures under the appropriate level of supervision.	Chapter 4

Useful Resources

World Wide Web and University Library.

Course Content		
Week	**Topics**	**Chapter in Textbook (handouts)**
1	Introduction to central system imaging, principles and terminology related to radiographic positioning.	Student become able to distinguish body and skull planes
2	Eid Al-adha vacation	
3	Chest anatomy	Radiographic Anatomy Bony thorax
4	Chest radiographic position	Chest basic views, central ray and signs of excellence
5	Sign of excellent and image evaluation for radiographic image	
6	pelvis anatomy and radiographic position	Pelvis basic views, central ray and signs of excellence.
7	First Exam	
8	abdomen anatomy and radiographic position	Abdomen basic views, central ray and signs of excellence.
9	spine anatomy	Anatomy of C-spine, T-spine, L-spine
10	spine radiographic position	C-spine, T-spine, L-spine and their position
11	Second exam	
12	skull anatomy and skull radiographic position sinuses anatomy and radiographic position	Skull basic view , central ray and signs of excellence.Sinuses basic views, central ray and

		signs of excellence
13	Review	
14	Final exam	

Date	Title of the Lecture	Lecturer
	Introduction to central system imaging, principles and terminology related to radiographic positioning	Haytham AL Ewaidat
	Chest anatomy and radiographic position	Haytham AL Ewaidat
	Chest anatomy and radiographic position	Haytham AL Ewaidat
	Sign of excellent and image evaluation for radiographic image	Haytham AL Ewaidat
	pelvis anatomy and pelvis radiographic position	Haytham AL Ewaidat
	First Exam	Haytham AL Ewaidat
	spine anatomy	
	spine radiographic position	Haytham AL Ewaidat
	abdomen anatomy	Haytham AL Ewaidat
	abdomen radiographic position	Haytham AL Ewaidat
	Second exam period	Haytham AL Ewaidat
	skull anatomy	Haytham AL Ewaidat
	skull radiographic position and sinuses anatomy and radiographic position	Haytham AL Ewaidat
	Review	Haytham AL Ewaidat
	Final exams period	

Lab Content & Outcomes			
Lab#	**Lab**	**Content**	**Outcomes**
1	Introduction to the Positioning Considerations for Routine Radiographic Procedures	• Grading • Attendance policy • Conventional lab content • Grouping	• The student will be oriented about the lab policy. • The student will be assigned a lab group.
2	Bony thorax	• Ribs • Sternum Sternoclavicular articulations (Procedure and anatomy).	• The student will be able to identify and describe the chest anatomy and procedure
3	Bony thorax	• Ribs • Sternum Sternoclavicular articulations (Procedure and anatomy)	• The student will be able to identify and describe the chest anatomy and procedure.
4	Pelvic girdle	• Pelvis and Hip (Procedure and anatomy).	• The student will be able to describe and use the different equipment used in the conventional unit. • The student will be able to identify and describe the pelvic anatomy and procedure.
5	Vertebral column	• Cervical • Thoracic • Lumbar • Sacrum and coccyx • Sacroiliac articulations • Scoliosis survey (Procedure and anatomy).	• The student will be able to identify and describe the vertebral column anatomy and procedure.
6	Vertebral column	• Cervical • Thoracic • Lumbar • Sacrum and coccyx • Sacroiliac articulations • Scoliosis survey (Procedure and anatomy).	• The student will be able to identify and describe the vertebral column anatomy and procedure.
7	Skull	Skull lines • Glabellomeatal line • Interpupillary line	• The student will be able to identify and describe the skull

		• Orbitomeatal line • Infraorbitomeatal line • e.Acanthiomeatalline • f.Mentomeatal line	anatomy and procedure.
8	Skull	Skull landmarks • Auricular point • Gonion (angle) • Mental point • Acanthion • Nasion • Glabella • Inner canthus • Outer canthus • Infraorbital margin • Occlusal plane • External auditory meatus • Mastoid tip	• The student will be able to identify and describe the skull anatomy and procedure.
9	Skull	Procedures	• The student will be able to identify and describe the skull anatomy and procedure.
10	Facial and paranasal sinuses	• Facial bones • Nasal bones • Orbits/optic foramina • Zygomatic arches • Mandible • Temporomandibular articulations • Paranasal sinuses	• The student will be able to identify and describe the Facial and paranasal sinuses anatomy and procedure.
11	Facial and paranasal sinuses	Procedures	• The student will be able to identify and describe the Facial and paranasal sinuses anatomy and procedure
12	**Film Critiques**		• The student will be able to identify and describe the Sign of excellent and image evaluation for radiographic image
13	**Exams**		

Additional Notes

Attendance policy:

. The University regulations are applied (10% and 20% with approved excuses)

Expected workload:

. TBA

Feedback:

. Through email, personal communication, and eLearning