

## **Radiographic Technique (2)DRT321**

3 <sup>rd</sup> year Semester 2				
Course Title	Lecture	Tutorial	Practical	Credit Hours
Radiographic Technique (2)	4	2	1	4

### **Course Description**

This course will introduce to and familiarize the student with the basic routine of radiographic positioning, shielding techniques, and related terminology. Actual radiographs are included for analysis of proper positioning and overall image quality.

### **Prerequisite**

HAn I 116 , HAn II 126, RAN216,CNU228,DRT311

### **Text Book**

K. C. Clerk Radiographic positioning

### **Course Objectives**

Upon successful completion of this course the student is expected to :-

Describe student positioning terms, Demonstrate proper use of positioning skills, Cite the structures demonstrated on routine radiographic procedures, evaluate images for positioning, centering , appropriate anatomy and overall image quality, discuss equipment and supplies necessary to complete radiographic procedures, list basic and special projections for each area of interest., apply general radiation safety and protection practices associated with radiologic examinations.

## **Topic covered**

### **Lecture 1,2,3,4 General Revision(theory and Demonstration )**

Upper Limbs, Lower Limbs, Vertebral Column,

### **Lecture 5,6**

Image Quality (factors that influence the image, artifacts, causes,)

### **Lecture 7,8(general Revision for Chest Radiography (Lungs, Heart)).**

### **Lecture 9,10**

#### **Positioning of the following studies:**

- Bony thorax
  - Ribs
  - Sternum
  - Sternoclavicular articulations

### **Lecture No 11**

Test No1

### **Lectures 12,13,14,15,16,17**

Positioning of the following studies

#### **Skull Radiography: Cranium& Facial**

- Cranium
  - Skull
  - Facial bones
  - Nasal bones
  - Orbits/optic foramina
  - Zygomatic arches
  - Mandible
  - Temporomandibular articulations
  - Paranasal sinuses
  - Petrous Temporal bones, Internal Auditory Meatus, Middle and External ear
  - Mastoid air cells

**(The Study include The Basic and modified Techniques)**

### **Lectures18**

Test No1

## **Lecture 19,20,21**

### **Abdominal Radiography:**

Acute Abdominal Pain  
Intestinal Obstruction.  
Abdominal Preparation(for KUB,GIT)

## **Lectures22,23,**

### **Contrast media Studies:**

*Drug Categories of Relevance to Radiography*  
(Side Effects, Uses and Impacts on Medical Imaging  
*Classification of Contrast Agents.*  
*Routes of Drug Administration*  
Systemic: Oral, Rectal, Tube/catheter, and Inhalation  
Intravenous, Intra-arterial, and Intrathecal

## **Lectures24,25**

Abdomen &Urological studies

General Procedure, Patient and body part positioning, Structures and functions demonstrated, Positioning for KUB,IVU procedures

## **Lecture 26**

Test No2

## **Lecture 27,28**

Dental Radiography(Intraoral Examinations, Extra oral Examinations

OPG, Cephalometry)

## **Lecture29,30**

\_General Course Revision.

## **Class /Lab Schedule**

- 4-hours lecturers , 1- hours practical per week.

## **Computer Application**

- None.

## **Laboratory Project**

- Demonstration in the X-Ray Department.

## **Contribution to Meeting the Professional Component**

- Diagnostic Radiology 4- credit hours.

## **Relationship of course to programe Outcomes**

- This course enhanced the students to :
- Understand clinical observation of radiology department , radiographic procedures and x-ray equipment.
- Ability to define radiographic positioning terms , manipulate equipment properly, position and align anatomical structure and equipment, evaluate images for proper demonstration of anatomy and pathology.

## **Prepared by**

Dr Caroline Edward Ayad

## **Date of Preparation**

June 2010

