

<b>Specialization</b>	<b>Radiologic Technology</b>
<b>Course Number</b>	<b>020810111</b>
<b>Course Title</b>	<b>Nursing care in radiology department</b>
<b>Credit Hours</b>	<b>(3)</b>
<b>Theoretical Hours</b>	<b>(2)</b>
<b>Practical Hours</b>	<b>(3)</b>

**Brief Course Description:**

- ❖ This course covers the general patients care in radiology departments. Moreover, it deals with vital signs, cardiac arrest, accident victims, aseptic techniques, contrast media reactions. It also provides students with some knowledge about methods of sterilization and isolation.

**Course Objectives:**

- Upon the completion of the course, the student will be able to:
1. Understand the ways of dealing with all types of patients properly.
  2. Understand the types of sterilization techniques.
  3. Cope with all emergency cases occur in radiology department.
  4. Cope with geriatric and pediatric patients.

Unit Number	Unit Name	Unit Content	Time Needed
1	<p style="text-align: center;"><b>The patient in radiographic imaging</b></p>	<ul style="list-style-type: none"> <li>• Objectives.</li> <li>• Basic HumanNeeds</li> <li>• PatientAssessment: <ul style="list-style-type: none"> <li>○ DataCollection.</li> <li>○ DataAnalysis</li> </ul> </li> <li>• Communication withpatient: <ul style="list-style-type: none"> <li>○ TherapeuticCommunications.</li> <li>○ Non therapeuticCommunications</li> </ul> </li> </ul>	

2	<p style="text-align: center;"><b>Infection control</b></p>	<ul style="list-style-type: none"> <li>• Objectives.</li> <li>• Elements Needed to Transmit Infection.</li> <li>• Infection Control practices in Health care setting: <ul style="list-style-type: none"> <li>○ Dress in the workplace.</li> <li>○ Hair.</li> <li>○ Hand Washing.</li> <li>○ Additional infection control considerations.</li> <li>○ Eye Protection.</li> <li>○ Gloves.</li> <li>○ Cleaning and proper waste Disposal.</li> <li>○ Disinfection.</li> <li>○ Transmission</li> </ul> </li> <li>• Based precautions: <ul style="list-style-type: none"> <li>○ Air bore precautions</li> <li>○ Droplet Precautions.</li> <li>○ Contact Precaution</li> <li>○ Protective or Reverse Isolation.</li> </ul> </li> </ul>	
	<p style="text-align: center;"><b>Clinical part</b></p>	<ul style="list-style-type: none"> <li>• Perform Medical Hand Washing Technique: <ul style="list-style-type: none"> <li>○ Differentiate between contaminated, clean, sterile terminology.</li> <li>○ List the most common type of health care associated infections.</li> <li>○ Identify the Indication for medical hand washing.</li> <li>○ Identify the duration of medical hand washing (40-60 seconds).</li> </ul> </li> </ul>	
3	<p style="text-align: center;"><b>Basic patient care and safety radiographic imaging</b></p>	<ul style="list-style-type: none"> <li>• Objectives.</li> <li>• Care of patient Belongings.</li> <li>• Methods of moving patients: <ul style="list-style-type: none"> <li>○ By Gurney Radiographic Sheet Transfer.</li> <li>○ Sliding Board Transfer.</li> <li>○ By Wheel chair.</li> <li>○ Using Gait or Transfer Belt.</li> </ul> </li> <li>• Use of Immobilizers.</li> <li>• Positioning the patient for Diagnostic Imaging Examinations.</li> <li>• Assisting the patient to Dress and undress Patient with intravenous Infusion.</li> <li>• The disabled patient</li> </ul>	

	<b>Clinical part</b>	<ul style="list-style-type: none"> <li>• Wear a Protection (Isolation) Barrier: <ul style="list-style-type: none"> <li>○ Recognize indication for doing protective isolation items.</li> <li>○ Differentiate between the clean and sterile donning of protective items.</li> <li>○ Differentiate between contaminated, clean, sterile terminology.</li> <li>○ List the most common type of health care associated infections.</li> </ul> </li> </ul>	
4	<b>Surgical asepsis and the radiographer</b>	<ul style="list-style-type: none"> <li>• Objectives.</li> <li>• Methods of Sterilization.</li> <li>• Disinfection.</li> <li>• Packing and storing sterile supplies.</li> <li>• Opening sterile packs.</li> <li>• Taking Radiographic films in the operating room.</li> </ul>	
	<b>Clinical part</b>	<ul style="list-style-type: none"> <li>• Open a Sterile Package: <ul style="list-style-type: none"> <li>○ List factors that maintain and ensure the sterility of wrapped package.</li> <li>○ Define sterile, clean, septic and aseptic methods.</li> <li>○ Recognize indications and conditions required performing sterile aseptic techniques</li> </ul> </li> </ul>	
5	<b>Trauma and mobile radiographic considerations</b>	<ul style="list-style-type: none"> <li>• Objectives.</li> <li>• Traumatic Injuries <ul style="list-style-type: none"> <li>○ The patient with a Head Injury.</li> <li>○ The patient with a Facial Injury.</li> <li>○ The patient with a Spinal Cord Injury.</li> <li>○ Imaging consideration for the Trauma or Mobile Patient.</li> <li>○ The patient with a Fracture.</li> <li>○ The patient with abdominal traumas.</li> <li>○ The confused patient.</li> <li>○ The Intoxicated patient</li> </ul> </li> </ul>	
	<b>Clinical part</b>	<ul style="list-style-type: none"> <li>• Put Patient in Lateral Position (Side Lying) with Support: <ul style="list-style-type: none"> <li>○ Identify the major assessment point before changing position.</li> <li>○ Identify the alternative position for all radiographic studies specifically when dealing with inpatient.</li> </ul> </li> </ul>	

6	<p><b>Pediatric and geriatric radiography considerations</b></p>	<ul style="list-style-type: none"> <li>• Objectives.</li> <li>• The high – risk newborn infant.</li> <li>• The Adolescent or older child.</li> <li>• Transporting infants and children.</li> <li>• Immobilizing the AnxiousChild.</li> <li>• The Geriatricpatient: <ul style="list-style-type: none"> <li>○ Integumentary System.</li> <li>○ Changes in the head andNeck.</li> <li>○ PulmonarySystem.</li> <li>○ The CardiovascularSystem.</li> <li>○ The GastrointestinalSystem.</li> <li>○ The HepaticSystem.</li> <li>○ The Genitourinary System.</li> <li>○ The MusculoskeletalSystem.</li> <li>○ The patient who has had ArthroplastySurgery.</li> <li>○ The NeurologicSystem.</li> <li>○ Culture andAging.</li> <li>○ ElderAbuse.</li> </ul> </li> </ul>	
	<p><b>Clinical part</b></p>	<ul style="list-style-type: none"> <li>• Transferring Patient from Bed to Chair and the Radiographic Table: <ul style="list-style-type: none"> <li>○ Transfer the patient between the bed and wheelchair before and after radiographic procedures.</li> <li>○ Identify the most important information should be assessed before performing radiographic imaging.</li> </ul> </li> <li>• <b>Moving Patient Up on Bed (For Portable Chest Radiographic Imaging):</b> <ul style="list-style-type: none"> <li>○ Move up clients slide down from Fowler’s position or pulled down traction for taking radiographic imaging.</li> </ul> </li> <li>• <b>Taking Radiograph in the Operating Room:</b> <ul style="list-style-type: none"> <li>○ Interpret the radiology requisition.</li> <li>○ Change into proper OR clothing</li> <li>○ Maintain sterile field in specific OR suite.</li> <li>○ demonstrate safe practices</li> <li>○ Dealing with C-ARM unit and applies</li> <li>○ Appropriate radiation safety procedures.</li> </ul> </li> </ul>	

7	<p><b>Care of patients during special procedures</b></p>	<ul style="list-style-type: none"> <li>• Objectives.</li> <li>• Interventional procedures.</li> <li>• Computed tomography.</li> <li>• Ultrasonography.</li> <li>• Magnetic Resonance imaging.</li> <li>• Positron emission tomography.</li> <li>• Mammography.</li> <li>• Urinary Catheterization.</li> <li>• Barium studies of the gastrointestinal tract.</li> </ul>	
	<p><b>Clinical part</b></p>	<ul style="list-style-type: none"> <li>• Always wash your hand before and after any exam.</li> <li>• Clean the Bucky or the table.</li> <li>• Keep the room in comfortable temperature.</li> <li>• Protect patient privacy.</li> <li>• Ensure clean and appropriate sized gowns are available.</li> <li>• Display health information.</li> <li>• Show honesty and deficiency.</li> <li>• Remember to smile.</li> <li>• Use sense of humor when appropriate.</li> <li>• Remember each patient is an individual.</li> </ul>	

**Teaching Methodology:**

- 1- Lectures.
- 2- Discussion, Seminars & Quizzes.
- 3- Home works.
- 4- Demonstration and practical training.
- 5- Training field competencies assessment.

**Text Book and References:**

- 1- Toress's Patient Care In Imaging Technology, Eighth Edition 2013, Lillian S. Toress.

- 2- Chesneys' care of the patient in diagnostic radiography, 7<sup>th</sup> Edition  
Pauline J. Culmer 1995.
- 3- Ruth Ann Ehrlich Patient Care in Radiology 8<sup>th</sup> Edition, 2012,  
Mosby Company.
- 4- Introduction to Radiologic and Imaging Sciences and Patient Care,  
6th Edition by Arlene M. Adler, MEd, RT(R), FAEIRS and Richard  
R. Carlton, MS, RT(R)(CV), FAEIRS 2016.