Specialization	Radiologic Technology
Course Number	020810221
Course Title	Radio pharmacology
Credit Hours	(3)
Theoretical Hours	(3)
Practical Hours	(0)

## **Brief Course Description:**

□ This course provides the students with the basic knowledge about the drugs used in radiology department either for diagnosis, aiding diagnosis. It also provides students with the aim of using of contrast media, chemical and physical properties of C.M. adverse reaction of C.M and its treatment. The course deals with effect of C.M on affect body organs.

## **Course Objectives:**

Upon the completion of the course, the student will be able to:

- 1. Know the basic drugs used inradiology.
- 2. Know the indications and contra indications of these drugs.
- 3. Know the basic chemistry associated with these drugs.
- 4. Know what to do in case of anemergency.

Unit Number	Unit Name	Unit Content	Time Needed
	<b>Basic about C.M.</b>	• Basic about C.M.	
	Chemistry Background	<ul> <li>Osmolarity problem.</li> <li>Osmolarity problem.</li> <li>Theirsolution</li> </ul>	
	Practical aspects of drugs used in medicine	<ul> <li>Kidney.</li> <li>Heart.</li> <li>Vessels.</li> <li>Thyroid.</li> <li>Brain.</li> </ul>	
	Side effects	<ul> <li>Chemotoxicity</li> <li>Protein binding.</li> <li>Hydrophilicity &amp; lipophilicity</li> </ul>	
	Cardiovascular effects of drugs	<ul> <li>Effect of drugs in coronary angiography.</li> <li>Heart rhythm and ecg.</li> <li>Vascular system.</li> <li>Blood coagulation.</li> </ul>	
	Neurological effects of drugs	Neurological effects of drugs.	
	Steps taken in an emergency	<ul> <li>Treatment plan for drugs side effects and reactions.</li> <li>Patients at risk of an adverse reaction following</li> <li>radio pharmacological drug administration.</li> <li>Reducing the risk of an adverse</li> <li>drug reaction.</li> </ul>	

Teaching Methodology:

- 1. Lectures.
- 2. Discussion & Quizzes.
- Homeworks 3.

Text Books & References:

- 1.
- Contrast media in practice, P.Dawson, W. ClauBQustions and answers 1994. Contract media to see or not to see everything about C.M. Hans Hans H. Schild. 1994. 2.