Course Plan

Semester: 2	**Academic Year: 1405-1404**
Level: MSc	**Major: Medical Physics**
Course Title: Diagnostic Physics of Radiology	**Department: Medical Physics**
Course Code:	**University Professor or Faculty member:**
Class NO: 2	**Credit Hours: 34**
Prerequisite: NA	**Credit Units:** **(2 Theory and Practical)**
Availability of Professor: Dr. Mohammadreza Salamat	**Tel: 00989133186112**
Office Address: Department of Medical Physics	**E-mail: salamat@med.mui.ac.ir**
Name of Student Representative and Cellphone Number:	**Number of students: 7**

The General Purpose of the Lesson: Provide the scientific foundation needed to optimize medical imaging quality and ensuring radiation safety for patient and staff.

Learning Outcomes (Objectives): Apply diagnostic radiology physics principles for safe and effective medical imaging

Assessment Methods:

(The Assessment Methods that will be Used to Test Students Learning outcomes & the Skills & Competencies Stated in learning Outcomes)

Assessment	Score From 20
Mid Exam (Theory)	5
Final Exam	5
Practical Exam	5
Assignments:	5
Total Marks	20

Main References (Text Books): Radiologic Science and protection for Technologists, Stewart Carlyle Bushong

References for More Reading: Relevant High impact papers

Student's Responsibilities:
Attendance Rules: According to university rules **Department' s Attitudes:**
Mid Exam Date: Azar 1405 **Final Exam Date: Day 1405**

NO of Session	Main Topic	Teacher's Name	Place & Time	Date	Method of Presentation
1	X-ray Production	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		Online & Offline as well as face to face classes
2	X-ray Emission	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
3	X-ray Interaction With Matter	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
4	Radiographic Image Quality	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
5	11 Scatter Radiation	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
6	Screen-Film Radiography	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		

7	Screen-Film Radiography	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
8	Medical Imaging	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
9	Computer Science	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
10	Computed Radiography	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
11	Digital Radiography	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
12	Digital Radiographic Technique	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
13	Viewing the Digital Image	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
14	Screen-Film Radiographic Artifacts	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
15	Screen-Film Radiographic Quality Control	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
16	Digital Radiographic Artifacts	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
17	Digital Radiographic Quality Control	Dr. Mohammadreza Salamat	Class 2, Sundays 10-12		
	Preparation of the Students before the Beginning of the Class	**University Professor**	**Course Topics**	**Practical Classes**	
				The First Week	
				The Second Week	
				The Third Week	

				The Forth Week
				The Fifth Week