TOROS ÜNİVERSİTESİ

Vocatıonal School
Medıcal Imagıng Techniques

Course Information

RADIATION SAFETY AND PROTECTION					
Code	**Semester**	**Theoretical**	**Practice**	**National Credit**	**ECTS Credit**
		Hour / Week			
TGT102	Spring	2	0	2	2

Prerequisites and co-requisites	
Language of instruction	Turkish
Type	Required
Level of Course	Associate
Lecturer	Lec. Harika TOPAL ÖNAL
Mode of Delivery	Face to Face
Suggested Subject	
Professional practise (internship)	None
Objectives of the Course	The biological effects of radiation are to acquire knowledge, skills and responsibility about the basic principles of radiation protection
Contents of the Course	Structure of Radiology Department, Radiation Safety, Legal Regulations Related to Radiation Safety, Duties and Responsibilities in Emergency Situations

Learning Outcomes of Course

#	Learning Outcomes
1	Define radiation physics, radiation doses and units
2	Explains the early, late, and genetic effects of radiation
3	Defines radiation safety and radiation protection rules.
4	They disclose legal regulations related to Radiation Safety.
5	Takes necessary measures and applies them in accordance with radiation safety and radiation protection rules.

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Definition and Properties of Radiation	Presentation, Discussion, question-answer
2	Radiation Doses and Units	Presentation, Discussion, question-answer
3	Effects of ionizing radiation on human body	Presentation, Discussion, question-answer
4	Molecular And Cellular Radiobiology	Presentation, Discussion, question-answer
5	Early Effects of Radiation	Presentation, Discussion, question-answer
6	Late Effects of Radiation, Epidemiological Studies	Presentation, Discussion, question-answer
7	Fundamental Principles in Radiation Protection	Presentation, Discussion, question-answer
8	Midterm	written examination
9	Radiation Protection of Hospital Staff	Presentation, Discussion, question-answer
10	TAEK Radiation Safety Legislation	Presentation, Discussion, question-answer
11	Other Legal Legislation on Radiation Safety	Presentation, Discussion, question-answer

12	Structure of Radiation Safety Committees	Presentation, Discussion, question-answer
13	Other Legal Legislation on Radiation Safety	Presentation, Discussion, question-answer
14	Implementation and Implementation of Emergency Plans	Presentation, Discussion, question-answer
15	Design Features of Radiology Departments Design Features of Ionized Radiation Chambers	Presentation, Discussion, question-answer
16	Final Exam	Written Examination

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1			

Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Define radiation physics, radiation doses and units	4	1,2
2	Explains the early, late, and genetic effects of radiation	5	1,2
3	Defines radiation safety and radiation protection rules.	6	1,2
4	They disclose legal regulations related to Radiation Safety.	3	1,2
5	Takes necessary measures and applies them in accordance with radiation safety and radiation protection rules.	4	1,2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	2	28
2	Course Duration Except Class (Preliminary Study, Enhancement)	0	0	0
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	3	5	15
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	2	3	6
8	Midterm Exam	1	1	1
9	Quiz	0	0	0
10	Homework	2	2	4
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	4	4
16	Final Exam	2	1	2