



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Radiation Security								
Course Code	OHS509		Course Level		Second Cycle (Master's Degree)				
ECTS Credit	5	Workload	130 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The aim of this course is to know the harmful effects of radiation produced by the devices used for diagnostic purposes on the patient, the employee and the society and to learn the principles of radiation protection in order to prevent or minimize these damages.								
Course Content	Radiation, radiation safety, human effects, radiation protection								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods					Explanation (Presentation)				
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Temel Radyoloji Tekniği, Prof.Dr.Tamer Kaya

Week	Weekly Detailed Course Contents & Teaching Methods	
1	Theoretical	Radiation protection principles
2	Theoretical	Biological effects of radiation
3	Theoretical	Radiation Dose and Units
4	Theoretical	To know the design features of radiology departments Design features of rooms using ionized radiation
5	Theoretical	Detectors and Dosimetry
6	Theoretical	Personal Protective Measures
7	Theoretical	Radiation Detection and Measurement
8	Intermediate Exam	Midterm exam
9	Theoretical	Radiation protection of patient, patient and environment
10	Theoretical	Radiation protection methods in radiology
11	Theoretical	Radiation use and radiation protection in pregnant women
12	Theoretical	international organizations and authorities
13	Theoretical	TAEK Radiation Safety Legislation
14	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Reading	4	10	0	40
Individual Work	1	15	0	15
Midterm Examination	1	15	0	15



Final Examination	1	18	0	18
			Total Workload (Hours)	130
			[Total Workload (Hours) / 25*] = ECTS	5
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Recognize radiation and its hazards.
2	Learn radiation protection methods.
3	Learn radiation measurement techniques
4	Learns radiation protection methods of patients and their relatives
5	Learns international organizations

### Programme Outcomes (Occupational Safety and Health Interdisciplinary Master's Without Thesis)

1	Sufficient knowledge accumulation in Mathematics, Physical Sciences and Occupational Health and Safety topics; the ability to implement theoretical and practical knowledge in these fields in order to solve and model Occupational Health and Safety problems.
2	The ability to detect, to identify, to formulate and to solve complicated problems in Occupational Health and Safety and related fields by choosing and implementing appropriate analysis methods.
4	The ability to improve, to choose, to use modern and technical tools required for Occupational Health and Safety applications and the ability to benefit from information technologies effectively.
5	The ability to design experiments so as to inspect Occupational Health and Safety problems, to carry out experiments, to gather data, to analyse results and to comment on results.
11	Information about effects of Occupational Health and Safety applications on health, environment and safety in universal and social extend; awareness about national and international legislative regulations and standards, awareness about legal conclusions of Occupational Health and Safety solutions.

### Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	3	4	3	4	4
P2	5	4	5	5	5
P4	4	5	4	4	4
P5	5	5	5	5	5
P11	4	4	4	4	4

