

# AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Radiotherapy						
Course Code	TG002 Couse		se Level Short Cycle (Associate's Degre		Degree)		
ECTS Credit 3	Workload 76 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course The aim of this course is to give knowledge and skills about radiotherapy in classroom and hospital conditions.							
Course Content Radiotherapy and Radiotherapy: Fixed SSD, Isocentric, Oblique, Tangential Irradiation Techniques I, Radiotherapy Simulation, Immobilization, Individual Block Procedures, Application of Treatment Plan							
Work Placement	N/A						
Planned Learning Activities and Teaching Methods Explanation (Presentation), Discussion							
Name of Lecturer(s)							

Assessment Methods and Criteria						
Method	Quantity	Percentage (%)				
Midterm Examination	1	40				
Final Examination	1	70				

## **Recommended or Required Reading**

Principles and Radiation Oncology, Perez and Brady 2008 Clinical Radiation Oncology, Gunderson & Tepper, 2007 (Churchill Livingstone) Principles and Oncology Practice

Week	Weekly Detailed Cour	se Contents					
1	Theoretical	Basic principles of radiotherapy					
2	Theoretical	Radiotherapy Simulation (Bas-neck, thorax, breast)					
3	Theoretical	Radiotherapy Simulation (GIS, GUS)					
4	Theoretical	Radiotherapy Simulation (FAQ, Soft Tissue, Skin)					
5	Theoretical	External Radiotherapy Immobilization I					
6	Theoretical	External Radiotherapy Immobilization II					
7	Theoretical	External Radiotherapy Immobilization III					
8	Intermediate Exam	Midterm					
9	Theoretical	Individual Block Operations I					
10	Theoretical	Individual Block Operations II					
11	Theoretical	Application of Treatment Plan (Radiotherapy Devices)					
12	Theoretical	Application of Treatment Plan (Private Radiotherapy Applications)					
13	Theoretical	Application of Treatment Plan (Radiotherapy Rapids)					
14	Theoretical	Application of Treatment Plan (Early / Late Side Effects of Radiotherapy)					
15	Theoretical	Application of Treatment Plan (Early / Late Side Effects of Radiotherapy)					

Workload Calculation						
Activity	Quantity	Preparation	Duration	Total Workload		
Lecture - Theory	14	3	2	70		
Midterm Examination	1	2	1	3		



Final Examination	1		2	1	3	
	Total Workload (Hours)					
[Total Workload (Hours) / 25*] = <b>ECTS</b>						
*25 hour workload is accepted as 1 ECTS						

#### **Learning Outcomes**

- 1 Apply radiotherapy treatment plan.
- 2 Radiotherapy takes the necessary precautions in accordance with the radiation safety and radiation protection rules.
- 3 Simulates radiotherapy.
- 4 Acquire the effect of radiation on the tumor.
- 5 Learn to define radiotherapy.

#### **Programme Outcomes** (Medical Imaging Techniques)

- To be able to get information the working principles of Radiology, Nuclear Medicine and Radiotherapy devices, and distinguish their components, use these devices in accordance with operating instructions.
- 2 To be able to perform the procedures in accordance with the examination of Radiology and Nuclear Medicine imaging.
- To be able to apply the radiotherapy treatment, planned by radiation physicist with instruction of radiotherapist.
- To be able to develop and perform the film printing of the images that obtained by imaging techniques of Radiology, Nuclear Medicine
- To be able to evaluate the images that obtained by imaging techniques of Radiology, Nuclear Medicine in terms of radiographic quality and takes the necessary measures.
- To be able to know the medical and radiologic terminology, and pronounce and use them correctly
- To be able to take the necessary measures in accordance with the rules of Radiation safety and protection from radiation, and apply them.
- <sup>8</sup> To be able to distinguish the anatomical structures on images, obtained by the conventional and cross-sectional imaging techniques of Radiology, Nuclear medicine.
- 9 To be able to communicate well with patient, their family and the hospital staff.
- To be able to move with own professional duties, powers and responsibilities of the consciousness and apply the rules of professional ethics.
- 11 To be able to adapt to a multi-disciplinary team work.
- 12 To be able to have a basic knowledge of human physiology.
- 13 To be able to distinguish anatomical structures.
- To be able to establish a cause-and-effect relationship between events.
- To be able to have the ability of analytical thinking and problem solving.
- 16 To be able to apply the basic principles of first aid.
- 17 It has basic knowledge about human anatomy
- Understanding the basic concepts and principles of physics while providing, in the medical field and in particular medical imaging students better understand the issues involving technical vocational courses
- OHS 'basic concepts; work accidents, occupational diseases, occupational physicians, occupational safety specialist, İSGB, OSGB, hazard classes, risk assessment, OHS employee representatives is
- 20 Have basic knowledge about basic medical practices and makes applications

### 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	5	5	5	5	5
P2	5	5	5	5	5
P3	5	5	5	5	5
P4	5	5	5	5	5
P5	5	5	5	5	5
P6	5	5	5	5	5
P7	5	5	5	5	5

