

Vocational School / Medical Documentation and Secretariat
2022 - 2023 Academic Year
RADIOBIOLOGY
Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
RADIOBIOLOGY	TDS1125970	Fall Semester	2+0	2	2
Prerequisites Courses					
Recommended Elective Courses	Protection of radiation				
Language of Instruction	Turkish				
Course Level	Short Cycle (Associate's Degree)				
Course Type	Elective				
Course Coordinator	Assist.Prof. Neziha HACIHASANOĞLU ÇAKMAK				
Name of Lecturer(s)	Assist.Prof. Elif Zeynep YILMAZ				
Assistant(s)					
Aim	To investigate the interactions between ionizing radiations and living systems and their consequences.				
Course Content	This course contains; Introduction of radiobiology,general properties of ionizing radiation,cell biology,response to radiation at the cellular level,distribution of radiation energy, effects of radiation,divided cells and survival concept,radiation sensitivities of tissues and organs, effects of radiation for embryo and fetus,acute and late effects of radiation,radiation accidents,radiation protection and safety.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
To investigate the interactions between ionizing radiations and living systems and their consequences.			1, 2, 21, 3	A, C	
Teaching Methods	1: Lecture, 2: Question - Answer, 21: -, 3: Discussion				
Assessment Methods	A: Written Exam, C: Homework				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Introduction of radiobiology	presentations			
2	general properties of ionizing radiation	presentations			
3	cell biology	presentations			
4	response to radiation at the cellular level	presentations			
5	distribution of radiation energy	presentations			
6	effects of radiation	presentations			
7	divided cells and survival concept	presentations			
8	radiation sensitivities of tissues and organs	presentations			
9	effects of radiation for embryo and fetus	presentations			
10	acute and late effects of radiation	presentations			
11	radiation accidents	presentations			
12	radiation protection and safety	presentations			
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			

Resources
Powerpoint notes will be given to students.