Vocational School / Management of Health Facilities

2022 - 2023 Academic Year

RADIOBIOLOGY

Syllabus

Course Description					
Name	**Code**	**Semester**	**T+A Hour**	**Credit**	**ECTS**
RADIOBIOLOGY	SKİ1125970	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.