



RADIOPROTECTION

Enrollment year	2020/2021
Academic year	2020/2021
Regulations	DM270
Academic discipline	MED/36 (DIAGNOSTIC IMAGING AND RADIOTHERAPY)
Department	DEPARTMENT OF CLINICAL-SURGICAL, DIAGNOSTIC AND PEDIATRIC SCIENCES
Course	IMAGING AND RADIOTHERAPY TECHNIQUES
Curriculum	PERCORSO COMUNE
Year of study	1°
Period	(01/10/2020 - 22/01/2021)
ECTS	1
Lesson hours	8 lesson hours
Language	Italian
Activity type	WRITTEN TEST
Teacher	BALLARINI FRANCESCA - 1 ECTS
Prerequisites	The students must have learned the basic Physics concepts explained in the Physics lessons.
Learning outcomes	The students must learn the concept of ionizing radiation and the corresponding quantities; he/she must also learn the basic concepts related to the radiation biological effects and the ICRP recommendations
Course contents	<p>Concept of ionizing radiation, with mention of radiation interaction with matter.</p> <p>Main quantities: activity, exposition, absorbed dose, equivalent dose, effective dose, LET and RBE.</p> <p>Main aspects of the biological effects of ionizing radiation; natural radioactivity and dose limits.</p>

	<p>Contamination types. ICRP and its recommendations. Mention of the devices for radiation detection.</p> <p>Basic radiation protection in different medical activities.</p>
Teaching methods	Lectures with slides and further explanations at the blackboard.
Reccomended or required readings	Elementi di Fisica Biomedica, D Scannicchio e E Giroletti, EdiSES
Assessment methods	Written test with quiz and general questions; possible additional oral exam for the student who passed the written test and want to improve their grade.
Further information	
Sustainable development goals - Agenda 2030	\$lbl_legenda_sviluppo_sostenibile