UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Radiobiology

2021-1-I0301D004-I0301D016M

Aims

The student should be able to know and describe the Radiobiologic effects at atomic, molecular, biomolecular, cytologic and hystologic levels.

Contents

Aim of the teaching is to give students the knowledge about the biological effects of ionizing radiation.

Detailed program

Radiobiologic effects at atomic, molecular, biomolecular, cytologic and hystologic levels. Water irradiation and oxygen enhancement effect. Low and high LET radiation. Relative biological effect. Radiation of homogeneous and inhomogeneous cells and related survival. Repair and recovery of radiation damage. Short and long term effects on tissues and organs. Somatic and genetic effects. Stocastic an graduate effects. Radiation cancerogenesis.

Prerequisites

Teaching form

Lectures

Textbook and teaching resource

The Teacher will provide educational material

Semester

Second semester

Assessment method

Multiple choice test comprising 8 questions with only one correct answer among 5 aimed at evaluating global comprehension of course program. Each correct answer is scored 2. The test also includes other 8 questions about Radioprotection for a total of 16 questions.

Oral examination on request.

Office hours

By appointment required by mail