



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Radiobiology

2021-1-I0302D004-I0302D016M

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#### 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. Stochastic an graduate effects. Radiation cancerogenesis.

#### Prerequisites

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#### 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

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