

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **COURSE SYLLABUS**

## Radiobiology

2223-1-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 10 questions with only one correct answer among 4 aimed at evaluating global comprehension of course program. Each correct answer is scored 1,5.. The test also includes other 10 questions about Radioprotection for a total of 20 questions.

Oral examination on request.

#### Office hours

By appointment required by mail

#### **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING