



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Radiobiologia e Radioterapia Clinica

2627-3-I0303D015-I0303D066M

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#### Aims

Students should be able to know the rationale of the use of biological and clinical radiation, biological effects of radiations and to describe the various stages of the Radiotherapy

#### Contents

The course aims to provide students with the knowledge about Radiobiology and Clinical Radiotherapy

#### Detailed program

Biological effects of radiation.

Principles of radiopathology

The various phases of the radiotherapy procedure: prescription, setting, centering, simulation, acquisition of anatomical data, development of the treatment plan, evaluation of the plan, execution, verification, monitoring during treatment, monitoring over time.

The choice of beams: photons, electrons.

The choice of energy.

Performance in depth.

The beam modifiers.

The conformation.

Intensity modulation.

The irradiation geometry.

Dose fractionation methods.

The volumes of interest.

ICRU reports.

## **Prerequisites**

Health Care and Disease Prevention

## **Teaching form**

10 frontal lessons of 2 hours carried out in attendance

## **Textbook and teaching resource**

Teachers will provide educational materials

## **Semester**

First semester

## **Assessment method**

### **Monza**

Oral interview

### **Bergamo**

Multiple-choice questions and oral interview

## **Office hours**

By appointment required by mail

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION

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