

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **SYLLABUS DEL CORSO**

## Radiobiologia e Radioterapia Clinica

2425-3-I0303D015-I0303D066M

#### 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 Di	sease Prevention
Teaching form	
10 frontal lessons of	of 2 hours carried out in attendance
Textbook and t	eaching resource
Teachers will provide	de educational materials
Semester	
First semester	
Assessment m	ethod
Multiple choice que	estions and oral exam
Office hours	
By appointment rec	juired by mail
Sustainable De	evelopment Goals
GOOD HEALTH AI	ND WELL-BEING   QUALITY EDUCATION