UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Radiobiology and Clinical Radiotherapy

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 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

Multiple choice questions and oral exam

Office hours

By appointment required by mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION