UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Radiation Physics

2223-2-I0202D141-I0202D063M

Aims

The aim of the course is to present the physical structure of atoms, the nature of radiations, their interactions with matter and their use in medical imaging. The fundamentals of radiation protection will also be addressed.

Contents

Structure of atoms, nature of radiations and interactions with matter, medical imaging, radiation protection.

Detailed program

Introduction to atoms and radiations
Radiological imaging
X-Rays
Interaction of photons with matter
Nuclear medicine
Radioactivity
Biological effects of radiations
Radiation protection

Prerequisites

None

Teaching form

Frontal lessons (1 CFU / 8 hours)

Textbook and teaching resource

Slides of the lessons, provided to students during the course

Semester

First semester

Assessment method

The exam consists of an written assessment, with one open question on one of the topics of the course.

Office hours

By email appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING