



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Fisica delle Radiazioni

2223-2-I0202D141-I0202D063M

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#### 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

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