



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Diagnostic Imaging and Radiation Oncology

2122-4-H4101D020

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#### Aims

The Diagnostic Imaging and Radiotherapy course uses modules of Electronic and Computer Bioengineering and Applied Medical Technical Sciences. Taken as a whole, the aim of the course is to provide the student with the basic notions relating to diagnostic imaging techniques and the pharmacology of diagnostic agents for imaging; it also provides the theoretical and practical knowledge necessary for the correct prescription of diagnostic imaging tests and related interpretation of the reports, as well as for the indications and for the fundamental radiation treatment schemes of the most frequent neoplastic diseases

#### Contents

IMAGE DIAGNOSTICS INSTRUMENTATION

PHARMACOLOGY OF DIAGNOSTIC MEDICINAL PRODUCTS

DIAGNOSTIC IMAGING

RADIOTHERAPY AND RADIOMETABOLIC THERAPY

RADIOBIOLOGY AND RADIATION PROTECTION

## **Detailed program**

For the detailed program, refer to the individual modules

## **Prerequisites**

Basic knowledge on Physics, Chemistry, Physiology and Anatomy.

## **Teaching form**

Lectures

Lessons will be provided in presence, subject to any ministerial changes following the COVID pandemic situation

## **Textbook and teaching resource**

Suggested textbooks

1. R. Passariello - G. Simonetti: "Compendio di Radiologia: con 2172 figure a colori e b/n e 41 tabelle" Ed. Idelson-Gnocchi 2010.
2. P. Torricelli e M. Zompatori: "Manuale di Diagnostica per Immagini: per il corso di laurea in Medicina e Chirurgia" Ed. Esculapio 2016.
3. G. Cittadini: "Diagnostica per immagini e Radioterapia" Ed. Edra 2015
4. Perez & Brady: "Principles and Practice of Radiation Oncology" 2013
5. Lecture notes of Nuclear Medicine lessons

## **Semester**

II Semester

## **Assessment method**

Written test on topics of the module, included in the final examination that consists on 30 multiple choice questions

of which only one correct (1 point for each correct answer) and a subsequent oral interview on the topics covered in the lessons, to verify the knowledge and skills acquired, to which the student can access only if the written test is passed (minimum score = 18/30). There are no ongoing test.

## **Office hours**

By appointment, by e-mail contact.

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