

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **SYLLABUS DEL CORSO**

## Apparecchiature di Rm e Ultrasonografia

2526-2-I0303D035-I0303D051M

#### **Aims**

Students are expected to acquire basic knowledge on MR physics and Ultrasonography

#### **Contents**

The module aims to provide the student with the basic notions relating to the technical characteristics of Magnetic Resonance and Ultrasonography

#### **Detailed program**

Magnetic Resonance Imaging:

- Technical characteristics of MRI equipment (static magnetic field magnets, gradient coils, RF coils, Faraday cage, magnetic shielding)
- · Security in MRI

#### Ultrasonography:

- Technical characteristics and operating principles of ultrasound probes
- · Acquisition of ultrasound images in b-mode
- Doppler acquisition techniques (spectrum Doppler, color Doppler, power Doppler)

#### **Prerequisites**

Diagnostic Imaging Techniques I

## **Teaching form**

4 frontal lessons of 2 hours carried out in attendance

## Textbook and teaching resource

"Elementi di Risonanza Magnetica: Dal protone alle sequenze per le principali applicazioni diagnostiche" a cura di Mario Coriasco, Osvaldo Rampado, Gianni Boris Bradac. Edizioni Springer

The teachers will provide other educational materials

#### Semester

Second semester

## **Assessment method**

#### Monza

Multiple choice questions and open questions to evaluate preparation on the exam programme, the ability to organize knowledge and communication skills in a disciplinary context.

### Bergamo

Multiple choice questions and open questions to evaluate preparation on the exam programme, the ability to organize knowledge and communication skills in a disciplinary context. Any additional oral interview if requested by the teacher or student.

#### Office hours

By appointment required by mail

#### **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION

