



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Mri and Ultrasonography Instruments

2627-2-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
