

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# SYLLABUS DEL CORSO

# Tecniche di Diagnostica per Immagini III

2425-2-I0303D035

#### **Aims**

Students are expected to acquire basic knowledge on MR physics, MRI techniques, and main clinical indications of MR imaging and MR angiography for body and neuro imaging. Students are required to achieve a solid knowledge of radiological anatomy and demonstrate confidence in the use of coils, application of acquisition protocols and managing of contrast media in the context of body and neuro MR imaging. Student will learn the fundamental aspect of chemical classification, mechanism of action, general safety and approved clinical indications of MR contrast agents

#### **Contents**

The course aims to provide students with basic knowledge of physical principles, clinical indications, techniques, diagnostic protocols and applied aspects of magnetic resonance imaging

#### **Detailed program**

See individual modules

### **Prerequisites**

Diagnostic Imaging Techniques I

## **Teaching form**

Teaching takes place in attendance, with frontal and interactive lessons and practical exercises (see individual modules).

### **Textbook and teaching resource**

TECNICHE DI TOMOGRAFIA COMPUTERIZZATA E DI RISONANZA MAGNETICA- Cei Luigi. Società Editrice Universo (2011).

RM ADDOMINALE. PARTE GENERALE- Stefano Colagrande e Pasquale Paolantonio. Poletto Editore (2014).

LEZIONI DI NEURORADIOLOGIA - Bozzao, Colonnese, Pantano; Società Editrice Esculapio, 2019

The teachers will provide other educational materials

#### Semester

Second semester

#### Assessment method

#### Monza

Written and oral exam, to evaluate preparation on the exam program, the ability to organize knowledge and communication skills in a disciplinary context. The final evaluation will take into account the results obtained in both the written test and the oral test.

The written test will consist of:

- ? multiple choice questions and open questions on MRI and Ultrasonography equipment
- ? multiple choice questions and open questions on MR Image Training and Processing
- ? 2 open questions on Neuroradiological Semeiotics in MRI

The oral exam will cover the modules of Contrast Media, MRI Diagnostic Techniques and MRI Semeiotics.

#### Bergamo office

Written exam with multiple choice tests and open questions to evaluate the preparation on the exam program, the ability to organize knowledge and communication skills in the disciplinary field. Possible additional oral test upon request of the teachers or the student.

#### Office hours

By appointment required by mail

# **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION