

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

# **Applied Medical Techincal Sciences A**

2324-4-H4101D020-H4101D081M

# Aims

The pharmacological aspects of diagnostics medicinal products. Topics include fundamental of pharmacokinetics, pharmacodynamics and regulatory aspects related to their use in Diagnostic imaging. Introduction to the potential use of Molecular Neuroimaging to clinical practice and research

# Contents

Pharmacology of Diagnostic Medicinal Products

# **Detailed program**

Pharmacology of Diagnostic Medicinal Products

-Radiological contrast media: mechanism of action, pharmacokinetics and safety

-Radiopharmaceuticals: mechanism of action, kinetics of biodistribution and safety

-Regulatory affairs relative to their classification and reimbursement

Introduction to the potential use of Neuroimaging in clinical research

# Prerequisites

Basic knowledge on chemistry, physics and physiology and pharmacology that will be presented during the course if necessary

### **Teaching form**

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

#### **Textbook and teaching resource**

Slides presented during the course, paper and quiz for self evaluation

### Semester

Second

#### Assessment method

Evaluation with oral self-assessment test performed during the course; (closed questions or multiple choice); to test the ongoing learning skills, students will receive a list of question on the various lessons presented; in addition, to verify the exact understanding of the methods presented to answer a specific scientific question, papers will be provided and discussed in class;

#### WRITTEN EXAM: MULTIPLE-CHOICE QUIZ

Evaluation criteria: theoretical knowledge, ability in the application of diagnostic methods to a specific clinical or experimental contest.

#### **Office hours**

By Agreement with the teacher (email or telephone)

#### **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING