UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

# Diagnostics

**2223-3-H4102D018-H4102D054M**

## Aims

To provide the basic knowledge concerning the most important imaging modalities and their clinical use in the context of muscle-skeletal radiology. The role of conventional radiology in emergency clinical trials, and the role of cross-sectional imaging modalities will be assessed as well. The main aim of the course is to clarify how specific imaging techniques have to be employed in relation to the clinical issue.

## Contents

Conventional X rays examinations of the skeletal structures in different clinical settings. Computed tomography (CT) and Magnetic Resonance Imaging (MRI) in the most common and relevant clinical circumstances, in traumatology, and orthopedic settings. Ultrasound examination as a possible diagnostic alternative in specific conditions.

## Detailed program

Conventional X rays examinations, as a basic approach in clinical MSK radiology. US and CT examinations in trauma, and routine clinical issues. The prominent role of MRI in all the pathologic conditions of the knee, hip, and ankle. The mr imaging examination as a multiplanar multiparametric diagnostic tool of utmost importance: the shift from morphologic imaging toward the morpho-functional imaging. Fundamental information about the method of interpretation of a radiologic examination in MSK clinical radiology. Assessment of the most common pitfalls.

## Prerequisites

Basic knowledge of human anatomy, phisiology, and general pathology.

## Teaching form

Frontal lectures that require the active participation of students who will be involved in the subject by proposing group work, discussion, and temptative imaging interpretation.

## Textbook and teaching resource

Resnik et al. Radiology of the MSK sistem. (ed. 2018). Raven Press

## Semester

First semester

## Assessment method

Oral exam conducted in approximately 20- 30 minutes. The exam is positively evaluated with a score of 18/30 or higher. Oral discussion with possible deepening of one or more topics. The questions proposediwill be constructed in such a way as to induce the student to understand the clinical use and significance of any of the most relevant imaging modalities of routine clinical use, in standard clinical settings.

## Office hours

On appointment

## Sustainable Development Goals

GOOD HEALTH AND WELL-BEING