



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Sistemi Digitali e Controlli di Qualità

2526-1-I0303D006-I0303D021M

---

#### Aims

The course aims to provide students with knowledge of main digital radiological equipment, and Quality Controls

#### Contents

The student will learn main components of digital radiological equipment, physical and technological basis of diagnostic radiology; quality controls in diagnostic Imaging

#### Detailed program

Difference between different radiological devices used in digital radiography.  
Operating principles of indirect digital systems: Computed Radiography and Digital Radiography.  
Notes on analog-digital conversion; the pixel and the voxel.  
Direct digital systems.  
Printers and monitors.  
Notes on radioprotection.  
Italian legislation regarding quality controls; quality controls of radiographic accessories and radiological equipment.  
Quality controls of the radiological equipment described in the course and outline of the controls of the entire image acquisition, transfer, recording and display process.

#### Prerequisites

Organs and Functions

## **Teaching form**

10 2-hour lessons in attendance in mixed frontal/interactive modality with practical activities for students

## **Textbook and teaching resource**

F.MAZZUCATO: "Anatomia Radiologica. Tecniche e Metodologie in Radiodiagnostica" Ed.Piccin

R.PASSARIELLO "Radiologia, Elementi di Tecnologia". Idelson Gnocchi

Teachers will provide other educational material.

## **Semester**

Second semester

## **Assessment method**

### **Monza**

Written exam with open questions, multiple choice questions and exercises to assess preparation on the exam program, followed by a mandatory oral exam to assess knowledge and communication skills in the disciplinary field.

### **Bergamo**

Oral test to evaluate preparation on the teaching programme, the ability to organize knowledge in a short discussion and communication skills in a disciplinary context.

## **Office hours**

By appointment required by mail

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION

