UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Digital Systems and Quality Controls

2627-1-I0304D005-I0304D00502

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

• Differences between the various radiological devices used in digital radiography.
• Overview of analog-to-digital conversion; pixels and voxels.
• Direct digital systems.
• Printers and monitors.
• Image acquisition, transfer, and management systems.
• Overview of radiation protection.
• Italian regulations regarding quality control; quality control of radiographic accessories and radiological equipment.
• Quality control of the radiological equipment described in the course.

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

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.

Office hours

By appointment required by mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION