



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Tecniche e Traccianti in Pet

2122-3-I0303D036-I0303D063M

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#### Aims

The student should know the principal equipment and diagnostic techniques used in Positron Emission Tomography (PET), and of the methods to prepare radioactive tracers and relative doses

#### Contents

The course aims to provide knowledge of the principal equipment and diagnostic techniques used in Positron Emission Tomography (PET), and of the methods to prepare radioactive tracers and relative doses

#### Detailed program

PET techniques: acquisition and reconstruction modalities in oncological, cardiac and neurological studies. Acquisition and reconstruction modalities in quality control procedures (blank), calibrations, corrections (axial and transaxial normalization). Coincidence time acquisition and reconstruction. 2D-3D acquisition and reconstruction modalities. Attenuation correction methods: transmission imaging using Ge68-Cs137 sources, CT. Logistic organization of a PET centre, Detection systems. Applications: pathologies of the thorax, abdomen, pelvis, brain, muscle-skeletal, cardiovascular and endocrine apparatus, with particular reference to the neoplastic pathology.

#### Prerequisites

#### Teaching form

Exercises

## **Textbook and teaching resource**

The Teacher will provide educational materials

## **Semester**

First semester

## **Assessment method**

The **written test** includes 25 multiple choice questions (1 correct answer among 5 options) about all the topics of the course. The written test is evaluated with a mark ranging from 0 to 30. If the mark is superior to 18/30, the oral test will follow.

The **oral test** consists in the evaluation of the knowledge acquired among the course topics through open questions, possibly related to the mistakes made during the written test.

## **Office hours**

By appointment required by mail

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