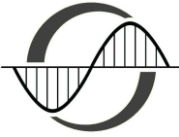




UNIVERSITÀ  
degli STUDI  
di CATANIA



DIPARTIMENTO DI FISICA E ASTRONOMIA  
“ETTORE MAJORANA”

DOTTORATO DI RICERCA IN FISICA  
CICLO XXXIX A.A. 2023/2024

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## Introduction to Medical Physics

CFU

### Teaching staff

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**Reception hours:** please, contact me by e-mail at any time

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### Program of the course:

1. Basic concepts in radiation dosimetry
  - a. Quantities for describing the interaction of ionizing radiation with matter
  - b. Charged-particle and radiation equilibria
2. The cavity theory
3. Dosimetry fundamentals
  - a. Concepts of radiation dosimetry and dosimeter
  - b. Interpretation of a dosimetric measure
  - c. General characteristics of a dosimeter
4. The role of the ionization chamber in irradiation dosimetry and its calibration protocols for clinical applications
5. Basis of detectors for dosimetry and microdosimetry

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### Bibliography:

F H Attix, Introduction to radiological physics and radiation dosimetry