



UNIVERSITÀ  
degli STUDI  
di CATANIA



DIPARTIMENTO DI FISICA E ASTRONOMIA  
“ETTORE MAJORANA”

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DOTTORATO DI RICERCA IN FISICA  
ANNO ACCADEMICO 2020/2021  
CICLO XXXVI

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## Introduction to Medical Physics

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### Teaching staff

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**Reception hours:**...

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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, .....

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