



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

VP10_DIP_FIS

Visiting Professor Program Academic year 2020/2021

DEPARTMENT OF PHYSICS

TEACHING COMMITMENT: 48 hours

COURSE TITLE

Medical Physics

TEACHING PERIOD

1st term

SCIENTIFIC AREA

Physics applied to Medicine

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

Ionizing radiation dosimetry.

Elements of radiobiology.

Tools and techniques in radiotherapy, imaging, health physics, nuclear medicine.

LEARNING OBJECTIVES

A) Knowledge and understanding

- knowledge of the basics of the interaction of ionizing radiation with biological tissue and dosimetry
- knowledge of some models of cellular inactivation induced by radiation
- understanding of the physics needed in the application to medicine of ionizing radiation in therapy, imaging and radiation protection

B) Applying knowledge and understanding

- ability in solving numerical problems used in some techniques of medical physics, radiotherapy, imaging and radiation protection

TUTORSHIP ACTIVITIES (IF APPLICABLE)

LAB ACTIVITIES (IF APPLICABLE)

OTHER ACTIVITIES (IF APPLICABLE)

VISITING PROFESSOR PROFILE DESCRIPTION

The candidate will have a strong involvement in teaching and research in the field of Experimental Physics applied to Medicine, with particular emphasis on the experimental tools to be used in the diagnosis and cure of cancer and, more in general, in the use of radiation in Medicine.

CONTACT PERSON AT THE DEPARTMENT

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