

ID

TM31_DIP_FIS

Teach Mob – Visiting Professors

Academic year 2016/2017

1 st Term
COURSE TITLE Medical Physics
Scientific area Physics
Department of Physics
Language used to teach: English
Teaching Commitment: 48 hours
Course summary Aim of the course is the introduction to subjects of Physics applied to Medicine, mainly in the use of ionizing radiation in therapy and diagnostics. The following subjects will be covered: ionizing radiation dosimetry (photons and charged particles); elements of radiobiology; tools and techniques in radiotherapy and radiodiagnostics; topics in nuclear medicine; radioprotection. Additional lectures will be given by researchers active in the fields of: neutron dosimetry, radiotherapy with Protons and Carbon ions; use of advanced computing techniques in Medicine.
Learning objectives To give the fundamentals in applied physics, especially related to the use and detection of ionizing radiations used in therapy and diagnostics.
Tutorship activities
Lab activities
Other activities besides the course: i.e. seminars and conferences addressed to PhD students and research fellows, dissemination conferences The Professor will give some seminars related to his research activity in detectors for radiotherapy. The seminars will be addressed to PhD and Specialization School in Medical Physics Students.
Visiting Professor Profile 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.
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