UCL Université catholique de Louvain

WRDTH3160

2015-2016

Dosimétrie informatisée en radiothérapie

5.0 credits	30.0 h + 60.0 h

Teacher(s) :	Grégoire Vincent ; Scalliet Pierre ; Vynckier Stefaan (coordinator) ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	A. Production of radiotherapy beams : - Cobalt-60, - linear accelerators, - neutron beams, proton beams, heavy ion beams. B. Definition of dosimetry quantities for radiotherapy: - PDD, RTM, RTA, OAR, isodoses, BSF, PSF. C. Quality assurance in radiotherapy : - definition and importance - recommendations - quality control in radiotherapy -quality control of CT scanners - quality control of linear accelerators - quality control of treatment planning systems - in-vivo dosimetry D. Calculation methods for external beam therapy - matrix system in TPS - separation of scatter and primary beam - pencil beam methods - Monte Carlo calculations E. Dosimetry for Brachy therapy
Aims :	*The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Faculty or entity in charge:	MED

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Master [120] in Physics	PHYS2M	5	-	
Master [120] in Biomedical Engineering	GBIO2M	5	-	
	RPHY9CE	5	-	