WRDTH3120

2015-2016

Dosimétrie en radiothérapie et contrôle de qualité

3.0 credits	30.0 h

Teacher(s) :	Vynckier Stefaan ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	A. INTRODUCTION - Definition of absorbed dose, KERMA and CEMA - Different types of ionizing beams used in radiotherapy B. INTERACTIONS WITH MATTER - Charged particles - Photons. - Neutrons. C. INTEGRATING DOSIMETRY DETECTORS - Calibration chain for dosimetry detectors - Calorimetry - Ionization Chambers. - Thermoluminescence. - Films. - Diodes. - Chemical dosimetry D. DETERMINATION OF THE ABSORBED DOSE IN A CLINICAL BEAM UNDER REFERENCE CONDITIONS - Calibration of an ion chamber in terms of Air-KERMA - Calibration of an ion chamber in terms of absorbed dose in water - Dosimetry recommendations based on Air-Kerma standards based on absorbed dose in water - Determination of the absorbed dose under non-reference conditions - Dosimetry audits E. INTRODUCTION TO RADIOTHERAPY TECHNIQUES
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	3	-	
Master [120] in Biomedical Engineering	GBIO2M	3	-	
	RPHY9CE	3	-	