

3.0 credits

30.0 h

Teacher(s) :	Vynckier Stefaan ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	<p>A. INTRODUCTION</p> <ul style="list-style-type: none"> <li>- Definition of absorbed dose, KERMA and CEMA</li> <li>- Different types of ionizing beams used in radiotherapy</li> </ul> <p>B. INTERACTIONS WITH MATTER</p> <ul style="list-style-type: none"> <li>- Charged particles</li> <li>- Photons.</li> <li>- Neutrons.</li> </ul> <p>C. INTEGRATING DOSIMETRY DETECTORS</p> <ul style="list-style-type: none"> <li>- Calibration chain for dosimetry detectors</li> <li>- Calorimetry</li> <li>- Ionization Chambers.</li> <li>- Thermoluminescence.</li> <li>- Films.</li> <li>- Diodes.</li> <li>- Chemical dosimetry</li> </ul> <p>D. DETERMINATION OF THE ABSORBED DOSE IN A CLINICAL BEAM UNDER REFERENCE CONDITIONS</p> <ul style="list-style-type: none"> <li>- Calibration of an ion chamber in terms of Air-KERMA</li> <li>- Calibration of an ion chamber in terms of absorbed dose in water</li> <li>- Dosimetry recommendations based on Air-Kerma standards based on absorbed dose in water</li> <li>- Determination of the absorbed dose under non-reference conditions</li> <li>- Dosimetry audits</li> </ul> <p>E. INTRODUCTION TO RADIOTHERAPY TECHNIQUES</p>
Aims :	<i>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".</i>
Cycle and year of study :	<a href="#">&gt; Master [120] in Physics</a> <a href="#">&gt; Master [120] in Biomedical Engineering</a> <a href="#">&gt; Advanced Master in Radiotherapy-Oncology</a> <a href="#">&gt; Certificat universitaire en physique d'hôpital</a>
Faculty or entity in charge:	MED