




Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

3 credits

15.0 h + 15.0 h

Q2

Teacher(s)	Gallez Bernard (coordinator) ;Vander Borghet Thierry ;
Language :	French
Place of the course	Bruxelles Woluwe
Main themes	Introduction to the use of radioisotopes : tracer, applications in vitro (pharmacology, RIA) and in vivo (with comparison to other imaging modalities) Preparation of radiolabelled molecules : nuclear reactions (neutron activation, charged particles, fission, generators), radiochemistry Two examples illustrated from the nuclear reaction, radiochemistry, pharmaceutical conditioning, quality controls, and use in nuclear medicine (+ comparison/ integration of other modalities for the diagnosis assessment) : - ^{99m}Tc generator, diphosphonate kits for the use in bone scintigraphy - ^{18}F -fluorodeoxyglucose and applications in PET oncology
Aims	1 Answer to three fundamental questions : why and how to use a radioactive isotope, and how to prepare it ? ----- <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>
Faculty or entity in charge	CRPR

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Certificat universitaire en radiopharmacie	RFAR9CE	3		
Certificat universitaire en physique d'hôpital	RPHY9CE	3		
Master [120] in Physics	PHYS2M	3		
Master [120] in Biomedical Engineering	GBIO2M	3		