

## WRFAR2100

2013-2014

## Radiochemistry, radiotoxicology & radiopharmacy

	4.0 credits	22.5 h + 60.0 h
--	-------------	-----------------

Teacher(s):	Gallez Bernard ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	I. Lecture Elements of nuclear physics for the applications in radiopharmacy Radiotoxicology Radiochemistry Radiopharmacy II. Practical exercises  Counting statistics Attenuation Protein labeling, purification, radiochemical purity Liquid scintillation: chemiluminescence, quenching Blood volume determination Quality control of generator 99Mo/99m Tc eluate Quality control of HMPAO-Tc Biological distribution
	III. SEMINARS  Personnalized work for the student in the area of his specialization
Aims:	This course is intended for (future) professionals with professional activities dealing with the use of non sealed radioactive sources. 3 areas are covered: radiotoxicology (with focus on internal contaminations, their diagnosis, and their treatments); radiochemistry (with focus on nuclear reactions and nuclear chemistry for the preparation of radiolabeled compounds for medical use); radiopharmacy (quality control and quality assurance, special problems with some radiopharmaceuticals)  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".
Content :	Lectures: 2 hours blocks on a special topic Practical exercise: 1 week with handling of radioactive materials (labelling, quality control) Seminars: Personnalized work for the student in the area of his specialization
Cycle and year of study :	Advanced Master in Radiotherapy-Oncology     Advanced master in Nuclear Medicine     Certificat universitaire en radiopharmacie
Faculty or entity in charge:	FARM