

3 credits

30.0 h

Q2

Teacher(s)	Gallez Bernard ;
Language :	French
Place of the course	Bruxelles Woluwe
Prerequisites	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Main themes	Several aspects of inorganic pharmaceutical chemistry will be covered with a special emphasis in toxicology, therapeutics and diagnostics.
Aims	<p>1 The aim of this lecture is to introduce the field of inorganic chemistry. Particularly, the lecture will give the fundamentals notions to understand the use of radiolabelled compounds and metal complexes in pharmaceutical and biomedical field.</p> <p>-----</p> <p><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></p>
Content	Radionuclides in pharmacy and medicine : elements of nuclear physics, radioactive decays, interactions with the matter, detection of radiations, radiobiology, radiotoxicology, preparation of radioisotopes for biomedical use, in vitro applications (RIA), in vivo applications (nuclear medicine), and comparison with other imaging modalities Metal complexes in pharmacy and medicine : description of the interaction metal-ligand, diagnostic applications (contrast agents), therapeutic applications (anti-cancer, anti-acids, anti-bacterial activites, mineral supplements), toxicity of metals (lead, mercury, cadmium, manganese) and chelation therapies, elements of bioinorganic chemistry
Faculty or entity in charge	FARM

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Pharmacy	FARM1BA	3	WMD1102 AND WMD1104 AND WFARM1243 AND WFARM1219	