

## WFARM1310

2010-2011

## Inorganic drugs with use diagnosis and therapeutic

| 3.0 credits | 30.0 h |
|-------------|--------|
|             |        |

| Teacher(s):                  | Gallez Bernard ;  |
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| Language :                   | Français  |
| Place of the course          | Bruxelles Woluwe  |
| Main themes :                | Several aspects of inorganic pharmaceutical chemistry will be covered with a special emphasis in toxicology, therapeutics and diagnostics.  |
| Aims:                        | The aim of this lecture is to introduce the field of inorganic chemistry. Paticularly, the lecture will give the fundamentals notions to understand the use of radiolabelled compounds and metal complexes in pharmaceutical and biomedical field.  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 :                    | 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 |
| Cycle and year of study :    | <ul> <li>&gt; Bachelor in Information and Communication</li> <li>&gt; Bachelor in Biomedicine</li> <li>&gt; Bachelor in Pharmacy</li> </ul>   |
| Faculty or entity in charge: | FARM  |