## WFARM1244 Travaux pratiques d'introduction à la chimie analytique

3.0 credits

UCL

Université catholique de Louvain

0 h + 105.0 h

| Teacher(s) :                 | Herent Marie-France ; Muccioli Giulio (coordinator) ;  |
|------------------------------|--|
| Language :                   | Français   |
| Place of the course          | Bruxelles Woluwe   |
| Prerequisites :              | general chemistry ; organic chemistry ; introduction to analytical chemistry   |
| Main themes :                | The teacher(s), helped by graduate students and technicians, will discuss the different types of particle exchange in a solution. The aim is first to give the practical basis that will help to understand the theoretical notions studied during WFARM1243; second to form the students to the analytical reasoning. |
| Aims :                       | At the end of the activity the student will be able to   |
|                              | Behave in an analytical lab environment  |
|                              | To understand notions such as 'trueness, accuracy, experimental error'   |
|                              | To understand and use an experimental protocol   |
|                              | To discuss the results he has obtained during the experiment<br>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s)<br>can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".   |
| Evaluation methods :         | continuous evaluation based on the post-experiment reports, on the evaluation of the student preparation to the day's experiment, and a final exam.  |
| Teaching methods :           | the activity takes place in didactic labs<br>the actual experiments are preceded by theoretical exercises (that need to be prepared by the student)  |
| Content :                    | <br>General aspects of an analytical lab ('good laboratory practices')   |
|                              | Gravimetry and precipitometry  |
|                              | Quantification of sulfates and chlorides by several techniques, and quantification of iodide based on the European pharmacopoeia   |
|                              | <br>Acidimetry   |
|                              | <br>Titrations in aqueous media  |
|                              | <br>Titrations in non aqueous media  |
|                              | <br>Complexometry  |
|                              | Measure of the drinking water hardness   |
|                              | <br>Screening for toxics (Bi ' Pb)   |
|                              | <br>Oxydimetry   |
|                              | <br>Quantification of several ions (iron, iodides, calcium) and of pharmaceutical substances (chloramine T, sulfanilamide)   |
| Cycle and year of study :    | ≥ Bachelor in Pharmacy   |
| Faculty or entity in charge: | FARM   |