# LCHM2180

*2015-2016*

# Integrated practical exercises

| 4.0 credits | 0 h + 45.0 h | 1q |
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| Teacher(s) : | Riant Olivier ; Garcia Yann ; Devillers Michel ; Elias Benjamin ; Leyssens Tom ; Hermans Sophie (compensates Devillers Michel) ; |
| Language : | Français |
| Place of the course | Louvain-la-Neuve |
| Main themes : | The programme covers:<br>- a series of practical exercises with minimum of two main disciplines<br>- presentation of exercises and discussion of experimental results by the students during seminars |
| Aims : | The practical exercises cover specific topics from the basic chemistry disciplines (analytical, inorganic, physical, and organic chemistry). They aim to consolidate the integration and use of general chemistry concepts applied to practical problems. The exercises aim to give a multidisciplinary practical formation as well as an opportunity to learn scientific communication through the presentation of seminars.<br>*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 : | The following exercises cover:<br>1. organic and physical chemistry including the synthesis of photochromic molecules, the demonstration of their photochromism, the kinetic analysis of their behaviour after irradiation and the study of synergetic solvent effects.<br>2. organic and analytical chemistry including the synthesis of dipeptides, their chiral separations, and characterisation by HPLC and NMR.<br>3. inorganic and analytical chemistry including the synthesis, spectroscopic and electrochemical characterisation of cobalt(III) chelates and cryptates<br><br>Experiments to be performed will be presented orally by the students during a first seminar. Another seminar is organised at the end of the exercises giving an opportunity to present and discuss the experimental results obtained by different groups of students. |
| Other infos : | Documents: A syllabus containing the whole set of manipulations to be carried out. |
| Faculty or entity in charge: | CHIM |

| Programmes / formations proposant cette unité d'enseignement (UE) | | | | |
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| Intitulé du programme | Sigle | Credits | Prerequis | Acquis d'apprentissage |
| Master [120] in Chemistry | CHIM2M | 4 | - | 🔍 |
| Master [60] in Chemistry | CHIM2M1 | 4 | - | 🔍 |