

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

3 credits

22.5 h + 7.5 h

Q1

|                             |   |
|-----------------------------|---|
| Teacher(s)                  | Robiette Raphaël ;  |
| Language :                  | French  |
| Place of the course         | Louvain-la-Neuve  |
| Main themes                 | This course is aimed to a synthesis of various notions related to physical organic chemistry and already introduced in the various courses from the preceding years. It also gives an introduction to some selected physico-chemical tools used in the elucidation of reaction mechanisms in organic chemistry. The main themes are: -Structure - activity relationships in organic chemistry -Electronic and sterics effects -Influence of the reaction media in organic chemistry -Stereoelectronic effects in organic chemistry  |
| Aims                        | <p>The aim of this course is to introduce important notions and concepts selected in the field of physical organic chemistry. One of the goals of this course is to use those notions for a better understanding of reaction mechanisms in organic chemistry, the structure of reaction intermediates and transition states, and a deeper understanding of the molecular interactions which can influence chemical reactivity.</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> |
| Evaluation methods          | <b>Due to the COVID-19 crisis, the information in this section is particularly likely to change.</b><br>Written exam which can be completed by an oral exam   |
| Content                     | The course is build around the following chapter:<br>1. Reminders<br>2. Stereoelectronic effects<br>3. Linear Free Energy Relationships (LFER)<br>4. Mechanistic studies  |
| Inline resources            | Review articles as well as the slides of the course are available on moodle.<br><a href="https://moodleucl.uclouvain.be/course/view.php?id=7943">https://moodleucl.uclouvain.be/course/view.php?id=7943</a>   |
| Bibliography                | Le cours ne fait appel à aucun support particulier qui serait payant et jugé obligatoire  |
| Other infos                 | Background required: knowledge of organic chemistry from the previous years (Bachelor of Chemistry) and LCHM2140  |
| Faculty or entity in charge | CHIM  |

| Programmes containing this learning unit (UE) |                         |         |              |   |
|---|-------------------------|---------|--------------|---|
| Program title                                 | Acronym                 | Credits | Prerequisite | Aims  |
| Master [120] in Chemistry                     | <a href="#">CHIM2M</a>  | 3       |              |  |
| Master [60] in Chemistry                      | <a href="#">CHIM2M1</a> | 3       |              |  |