


3.00 credits

30.0 h

Q1

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| Teacher(s) | Herent Marie-France ;Muccioli Giulio (coordinator) ; |
| Language : | French > English-friendly |
| 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 | The teacher(s) will discuss the different kinds of spectroscopic techniques (UV, molecular fluorescence, atomic spectroscopy) ; and will then focus on the separation techniques such as HPLC and GC. They will also discuss the detectors that are used to detect the analytes following their separation (UV, FID, MS'). |
| Learning outcomes | <p>At the end of this learning unit, the student is able to :</p> <p>At the end of the activity the student will be able to</p> <ul style="list-style-type: none"> • Differentiate the different spectroscopic techniques (type of interaction with the light, nature of the measured signal,) 1 • Describe the different separation techniques that have been discussed • Explain the consequences of a change in the experimental conditions of a separation on the result of the separation. • Propose, based on the elements discussed during the course, the optimal method allowing the quantification of a given analyte. |
| Evaluation methods | a written exam spanning from theoretical aspects to exercise resolution |
| Teaching methods | WFARM1312 teaching activities. The activity WFARM1313 (practical training in instrumental analysis) allows to approach the theoretical notions studied in WFARM1312 in a more practical way. |
| Content | <p>This EU addresses the main instrumental techniques useful for the chemical analysis. The EU WFARM1243 is located in a learning continuum starting with the basics of analysis (WFARM1243) to the analysis of drugs (WFARM2117). The topics covered in this EU are listed below.</p> <ul style="list-style-type: none"> • Spectroscopic techniques <ul style="list-style-type: none"> • UV-Visible • Molecular fluorescence • Atomic spectroscopy • Introduction to the analytical separations • Electrophoretic methods • Liquid chromatography • Gas chromatography • Introduction to the mass spectrometry |
| Inline resources | An adapted version of the material presented during the lessons is available on the "moodle" platform. The materials for the practical part of the activity is also available on the "moodle" platform. |
| Faculty or entity in charge | FARM |

| Programmes containing this learning unit (UE) | | | | |
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| Program title | Acronym | Credits | Prerequisite | Learning outcomes |
| Bachelor in Pharmacy | FARM1BA | 3 | WFARM1243 AND WFARM1219 |  |