UCLouvain

wfarm2508

2026

Isolation and Structural Analysis of Natural Products

3.00 credits	22.5 h	Q2

Teacher(s)	Muccioli Giulio ;Spillier Quentin ;
Language :	French > English-friendly
Place of the course	Bruxelles Woluwe
Main themes	- Extraction, fractionation and purification methods of compounds from complex media: advantages and limits of the different methods. - Mass spectrometry: ionisation techniques, ions analyses and main fragmentations. - Nuclear Magnetic Resonance (NMR): basic principles - Use of spectral data for structure determination of organic drugs
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 At the end of this course, the students should be able to propose a method of extraction and purification for different types of organic molecules in complex media and identify the structure of simple compounds from spectroscopic data.
Evaluation methods	oral exam
Teaching methods	Self-directed learning with support from teachers for questions, documentary research, etc.
Content	several important aspects related to the isolation and structural analysis of natural products will be covered: - methods of extraction, fractionation and purification of organic molecules from complex extracts - mass spectrometry - the essential principles underlying NMR, enabling students to use the information contained in 1D NMR spectra of hydrogen and carbon. 2D NMR is also briefly covered
Inline resources	slides on Moodle
Bibliography	• "identification spectrométrique des composés organiques (Silverstein, 2 ème édition, De Boek éd.)
Faculty or entity in charge	FARM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Pharmacy	FARM2M	3		🔍