UCLouvain

wfarm1349

2026

Integrated Seminar in Pharmaceutical Sciences

4.00 credits	45.0 h	Q2

This learning unit is not open to incoming exchange students!

Teacher(s)	Frédérick Raphaël ;Hermans Emmanuel (coordinator) ;Jordan Bénédicte ;Muccioli Giulio ;Spillier Quentin ;
Language :	French > English-friendly
Place of the course	Bruxelles Woluwe
Prerequisites	*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.*
Main themes	Work done by a small team of students and presented to all students enrolled in the elective course. The various fields of pharmaceutical sciences taught previously will be discussed from the structure of an active compound to its action on the drug target. The student will have to think about the structure of the active compound (chemical functions, conformations, lipophily'), its origin (synthetic, natural product, produced from biotechnology), its target (s) drug (s) (receptor, transporter, ion channel, enzyme), its interaction with one (s)-and its ability to achieve these (pharmacokinetics and metabolism).
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 Give to the student the opportunity to integrate concepts learned throughout the degree in pharmaceutical sciences by bringing it to think 'how' cross, the structure of an active compound in its action on a drug target.
Evaluation methods	The document produced collectively will be used as the basis for an individual oral evaluation. This will focus on one of the aspects relating to the two molecules, which will be presented and discussed in depth using the material previously prepared in the group. The assessment will focus on the quality and comprehension of the information collected and presented. If possible, assessment during the term should preferably take place outside the examination session, to optimise the student's timetable (continuous assessment). In the event of a second session, the oral assessment is organised during the session.
Teaching methods	Students work in groups to carry out bibliographic research on two related molecules used in therapeutics. They integrate the information and documentation collected and, after critical analysis, summarise the essential elements in the form of a document that could be used for an oral presentation. With regard to these two molecules, the various areas of pharmaceutical sciences taught throughout the bachelor's degree in pharmaceutical sciences will be covered, from the structure of active compounds to their activity on the pharmacological target and their use in therapeutic. Students will be required to consider the structure of active ingredients (remarkable chemical functions, conformations), their origin (synthesis, natural product, product of biotechnological processes), their stability, detection/identification and dosage, their pharmacological target(s), interactions with these target(s) and the fate of these molecules in the body (pharmacokinetics and metabolism). This list of topics is not exhaustive and can be adapted according to the theme/active ingredients studied.
Content	This teaching unit invites students to use their knowledge of the various disciplines in the pharmaceutical sciences to analyse active ingredients used in human medicine. From the angles of chemistry, analysis, pharmacology, pathology, physiology, etc., they are encouraged to compare the properties of these active ingredients. They work mainly independently in groups. Teachers who are experts in the various pharmaceutical disciplines are available to guide them in gathering information, analysing it critically and compiling non-exhaustive data in the form of a summary document that could be used for a public presentation. This teaching unit, which aims to integrate the knowledge acquired throughout the bachelor's programme, is ideally positioned at the end of the course, just before the work placement. Logically, this teaching unit has many requirements and can only be envisaged for students at the end of the cycle.
Other infos	Prerequisite: Scientific knowledge acquired during the three years of the Bachelor of Pharmaceutical Sciences Supervision: The team of teachers

Faculty or entity in charge	FARM

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Additionnal module in Pharmacy	APPFARM	4		🔍