UCLouvain

lbbmc2204

2025

Cellular and molecular pharmacology - basic concepts

3.00 credits	30.0 h	Q1

Teacher(s)	Page Melissa ;
Language :	English
Place of the course	Louvain-la-Neuve
Prerequisites	In-depth knowledge in biochemistry and physiology.
Main themes	The course focuses on the cellular and molecular principles of pharmacology, in particular on the mechanisms involved in the interactions of pharmacological agents with cells, specific tissues and/or organs such as the cardiovascular or nervous systems or physio-pathological situations such as inflammation
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 At the end of this course, the student will be able to understand and mobilise the qualitative and quantitative aspects of the molecular interactions between pharmacological agents and the cell as a target for entry and metabolic interference. The sudent will be able to analyze the scientific literature on a specific pharmacological situation, to write a report, to present and discuss it orally.
Evaluation methods	Students will be evaluated on the following: 1) presentation (at the discretion of the professor either focusing on a pharmaceutical medication or a recent journal article. Depending on the number of enrolled students the presentation is either solo work or small groups. The presentation takes places during normal class hours. The presentation makes up 50% of the final note. 2) on the completion of a classical written examination (50 % of the final note). The exam takes place during the January exam session.
Teaching methods	This course will be taught face-to-face and will be as interactive as possible.
Content	Cellular and Molecular Pharmacology is a theoretical course taught in English. Together we will focus our attention on topics such as drug discovery, drug metabolism and personalized medicine. We will also discuss drugs in metabolic disorders and neurodegernative diseases. Aspects of this course include individual or group work.
Inline resources	This course primarily relies on Moodle. Lectures are derived from current literature and the following texts (which are not required by the students): Rang & Dale's Pharmacology - 8th Edition Basic & Clinical Pharmacology - 13th Edition
Bibliography	• Rang & Dale's Pharmacology - 8th Edition • Basic & Clinical Pharmacology - 13th Edition Nothing required
Faculty or entity in charge	SC

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Biochemistry and Molecular and Cell Biology	BBMC2M	3		
Master [120] in Agricultural Bioengineering	BIRA2M	3		