

3.0 credits

30.0 h

Teacher(s) :	
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	The first part of the course concerning the cellular and molecular principles of pharmacology will aim at explaining the mechanisms that generally underlie the interactions between pharmacological agents and cells in the framework of applications to particular tissues or organs, such as cardiovascular or nervous systems or physio-pathological situations such as inflammation. In the second part of the course, which focuses on a given disease, the course will consist in a series two mini-symposia with chosen speakers from two participating institutions (UCL and Université de Lille 2) as well as with invited speakers. The conferences will make the link between the pathology and pharmacological strategies to fight and arrest it.
Aims :	This course, organized in two distinct parts, aims at a double objective. The first part aims at: § understanding the qualitative and quantitative aspects of molecular aspects between pharmacological agents and the cell, as a target and as a site of passage and metabolism; § learning, by a personal work, to analyze from literature data, a pharmacological problem to reach a synthesis. The aim of the second part is to deepen the understanding of a given human pathology. According to the pathology to be approached, the course will cover the most recent data about the molecular and cellular mechanisms underlying the onset and progression of the disease; its epidemiology and etiology will be detailed as well as the methods and techniques for its analysis. This in depth study of the chosen pathology will integrate the rationale for its pharmacological treatment and prevention. The student will have to give a seminar about one or a few papers in connection with and integrating concepts approached in the course. The course will aim to be integrative to underline the multidisciplinary character of diseases understanding and their treatment. At the end of the course, the student will be able to analyze recent data available in the literature about the detailed pathology and its related pharmacological strategies. <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>
Content :	The aim of the first part will consist in learning to understand the molecular interactions between pharmacological agents and the cells, as targets, site of passage or metabolism. The aim of the second part is to focus on a particular human pathology, changing every year. Lecturers are selected scientists, from this university or the Université de Lille, co-organizing the teaching, as well as invited colleagues from other research centres.
Other infos :	Prerequisite: knowledge in biochemistry and physiology. Evaluation: - For the first part, the student may choose either a classical examination or to present orally a work performed, alone or in group, on a selected topic related to pharmacology. - For the second part, the student will present and discuss a work, based on recent literature data, dealing with a particular aspect present during the lectures.
Cycle and year of study :	> Master [120] in Biochemistry and Molecular and Cell Biology > Master [120] in Agricultural Bioengineering > Master [120] in Biomedical Engineering
Faculty or entity in charge:	BIOL