

2.0 credits

15.0 h + 7.5 h

Teacher(s) :	Hermans Emmanuel ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	Pharmacodynamics : theoretical aspects and experimental approaches, including quantitative assessment of drug activity. Comprehensive overview of pharmacological targets (receptors, ionic channels, enzymes). Basic concepts in pharmacotherapy : main principles governing the study of drug action and uses as well as the risks related to pharmacological treatments.
Aims :	By the end of this course, the students will possess a general knowledge of fundamental concepts in pharmacodynamics and pharmacotherapy : 1.Students will have an overview of the principal molecular targets of drugs, and will understand the methods used to evaluate the activity of drugs. 2. They will understand the fundamental aspects of the interactions between drugs and their targets 3. They will have an overview of the general rules concerning the use of drugs in human medicine. The aim of the course is to provide sufficient background for further study of all classes of drugs used in pharmacology (courses in Special Pharmacology and Pharmacotherapy) <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>
Evaluation methods :	Examination : Written exam with open questions (questions requiring extended explanation)
Teaching methods :	The course includes lectures (total of 15 h) and practical activities (7,5h)
Content :	General Pharmacology : mechanisms of action of drugs; quantitative study of drug-receptor interaction and related responses (potency and efficacy of drugs). Basic concepts of identification, classification and regulation of pharmacological targets. General Pharmacotherapy: therapeutic index; tolerance and pharmaco-dependance; secondary and unwanted effects of drugs; drug interactions; clinical evaluation of drugs: placebo effect, clinical studies. General description of pharmacological targets at the molecular level and their implication in diverse physiopathological processes. The course explores a large number of concepts specific to pharmacology. Beyond a theoretical description, several examples of drugs and their actions are explained.
Bibliography :	Support : All documents related to the lectures are available for students as paper copies (these documents are also accessible on Internet via the website of the university - iCampus).
Cycle and year of study :	> Bachelor in Pharmacy > Master [120] in Biomedical Engineering
Faculty or entity in charge:	FARM