UCLouvain

wmds1237

2024

Pharmacologie générale

3.00 credits	25.0 h	Q1

Teacher(s)	Elens Laure ;Haufroid Vincent ;Hermans Emmanuel (coordinator) ;
Language :	French
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.*
Learning outcomes	
Evaluation methods	Written exam that may include multiple-choice questions with reasoning and open-ended and/or short-answer questions. The student must demonstrate mastery of his knowledge and understanding of the concepts. As far as possible, the number of questions or their importance will take care to reflect the importance and or the hourly volumes of each of the parties. The final mark will take into consideration a weighting of the results of each part. Note: for students who do not have the Toxicology part (WMDS1237D), the final mark combines the marks of the Pharmacodynamics and Pharmacokinetics parts in an equivalent way. Any overall average below 10/20 is rounded down. The type of assessment chosen during the 1st exam session may be subject to change depending on the number of students registered for the second session.
Teaching methods	Presentation in lectures of concepts, principles and processes with illustrations from concrete examples of drugs commonly used in human medicine.
Content	**1. Introduction and general pharmacodynamics** Mechanisms of action of drugs Types of receptors/targets Relationships between receptor binding and pharmacological response Variability of individual response Large therapeutic classes **2. Pharmacokinetics.** Reminder of the main concepts (compliance, absorption, distribution, metabolism and excretion) Description of the main physiological causes of inter-individual pharmacokinetic variability (Age [children, elderly], Pregnancy, Genetic polymorphisms, Drug and environmental interactions...) Description of the main pathological causes of inter-individual pharmacokinetic variability (Renal function, Liver function, Obesity, Evolution of the disease...) **3. Toxicology** Basic concepts in toxicology: exposure, dose, danger, risk Factors determining the toxic response to a xenobiotic Main mechanisms of toxicity Antidote concept
Inline resources	Most of the documents projected during the course are available on the Moodle platform. Reference books are suggested at the start of each part of the course.
Bibliography	Goodman and Gilman's Pharmacological Basis of Therapeutics, Twelfth Edition, 2010 Casarett and Doull's Toxicology - The basic science of poisons, 9th Edition, 2019 Urs A. Boelsterli - Mechanistic Toxicology: The molecular basis of how chemicals disrupt biological targets, 2nd Edition, 2007
Faculty or entity in charge	MED

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Medecine	MD1BA	3	WMDS1114	🔍