UCLouvain

wmds1237

2020

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

3 credits	25.0 h	Q1

Teacher(s)	Hermans Emmanuel (coordinator) ;Lison Dominique ;Wallemacq Pierre ;
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.*
Aims	*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".*
Evaluation methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** Written exam, multiple choice questions with reasoning, open and short answer questions. The student will have to demonstrate mastery of his knowledge and understanding of the concepts. Any overall average less than 10/20 is rounded down to the nearest unit.
Teaching methods	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** 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 polymorphism (PK and PD) Description of the main pathological causes of inter-individual pharmacokinetic variability Renal function Liver function Obesity Evolution of the disease Drug and environmental interactions 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	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	Aims
Bachelor in Medecine	MD1BA	3	WMDS1114	🔍