

6.0 credits

45.0 h + 60.0 h

Teacher(s) :	
Language :	Français
Place of the course	Bruxelles
Prerequisites :	Sufficient knowledge of French. (ii) Having a good knowledge of general and organic chemistry applied to drugs : WMD1105 chimie générale et minérale WMD1106 chimie organique WFAR1004 chimie organique appliquée aux médicaments
Main themes :	(i) The course shows how organic synthesis gives access to members of therapeutic families related by a similarity of structure (e.g. benzodiazepins, tricyclic aromatics, dihydropyridines, fluoroquinolones, b-lactam antibiotics, b-blocking agents, steroids...). (ii) Two topics not covered in MD1004 and FARM1004 are also briefly presented : heterocyclic chemistry and polymers.
Aims :	This course is mainly devoted to the industrial synthesis of drugs, taking the retrosynthetic point of view : given a drug structure, how could it be synthesized from simple industrial precursors ? Practicals give the opportunity to master the methods of organic chemistry in the laboratory. <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 :	Evaluation : written examination measuring problem solving capabilities.
Content :	The lessons and tutoring activities are aimed to render the students familiar with the main reactions described in the patent literature on active principles (Axel Kleemann and Jürgen Engel, Pharmaceutical Substances, Syntheses, Patents, Applications, Thieme, Stuttgart, New York). The emphasis is on the retrosynthetic approach applied to the medicinal specialities of the Belgian market.
Cycle and year of study :	> Bachelor in Biomedicine
Faculty or entity in charge:	FARM