

8 credits

45.0 h + 45.0 h

Q2

Teacher(s)	Gohy Jean-François ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	This course will recall the prerequisites of the general chemistry which are of use in organic chemistry. The main concepts of the organic chemistry, necessary for a good understanding of biochemistry, will be introduced. Nomenclature, molecular structures, reaction mechanisms and stereochemistry of the basic compounds of organic chemistry will be explained. First links between these molecules and macromolecular biological compounds will be established.
Aims	<p>The aim of this course is to enable the student to manipulate the terminology, the molecular structures and the mechanistic schemes of organic chemistry with a sufficient ease. This needs to be considered in the introducing perspective of the biochemistry learning taking place during the second year.</p> <p>-----</p> <p><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></p>
Content	The course is divided in 2 parts: - An introduction recalls basic concepts: bond formation, isomerism, polarity and solubility relations, acids and bases. - In the second part, the organic functional groups, the reaction mechanisms and molecular structure, as well as the concepts of stereoisomerism are introduced. The compounds studied are alkanes and cycloalkanes, alkenes and alkynes, aromatic compounds, halogenated compounds, aldehydes and ketones, carboxylic acids and derivatives, amines. Substitution, addition, elimination and rearrangement are the most important mechanisms detailed during this section of the course.
Bibliography	Un syllabus constitué par le recueil des photocopies utilisé pour l'exposé. L'ouvrage de référence est: "Introduction à la chimie organique" par Hart et Conia, Interédition, Paris. Un syllabus d'autoapprentissage accompagne le syllabus du cours. Il contient des exercices couvrant une partie de plus en plus complète de la matière et la solution de ces exercices. de plus il reprends les questions d'examen d'années récentes. Des modèles moléculaires sont disponibles, pour aider la perception des aspects tridimensionnels de la chimie organique.
Faculty or entity in charge	SC

**Programmes containing this learning unit (UE)**

Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Veterinary Medicine	VETE1BA	8		