UCL Université catholique de Louvain

LCHM1341

2015-2016

Organic chemistry III

4.0 credits	30.0 h + 15.0 h	2q

Teacher(s) :	Riant Olivier ; Marko Istvan ;
Language :	Français
Place of the course	Louvain-la-Neuve
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.*
Main themes :	Frontier orbital theory. Fukui treatment. Thermal activation and photochemistry. Cycloadditions: regio and stereoselectivity. 1-3 dipolar cycloadditions. Rearrangement of Cope and related reactions. Cationic polycyclisations. Polymerizing cations. Biomimetic reactions. Radical polycyclisation. Polymerizing radicals. Natural antioxydants.
Aims :	In the continuity of the organic chemistry II course, this course follows the study of reaction intermediates and reaction mechanisms. A first part is dedicated to pericyclic reactions and to frontier orbital theory. Connections with the physical chemistry course will be highlighted. The second part treats the reactivity of carbocations and radicals. Examples from the biochemistry course will be used to illustrate these concepts. In both parts emphasis is put on all aspects of selectivity while creating new bonds. *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".*
Faculty or entity in charge:	CHIM

Programmes / formations proposant cette unité d'enseignement (UE)

Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Bachelor in Chemistry	CHIM1BA	4	LCHM1111 **and** LCHM1141 **and** LCHM1241	🔍