

4.0 credits

30.0 h + 15.0 h

2q

Teacher(s) :	Marko Istvan ; Riant Olivier ;
Language :	Français
Place of the course	Louvain-la-Neuve
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. <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>
Cycle and year of study :	> Bachelor in Chemistry
Faculty or entity in charge:	CHIM