

**SC****CHIM2140 Chimie organique**

[45h] 4.5 credits

**Teacher(s):** Istvan Marko, Olivier Riant  
**Language:** french  
**Level:** 2nd cycle course

**Aims**

To widen the knowledge in organic chemistry. Appreciation of organic intermediates reactivity. Development of knowledge in organic chemistry synthesis. Initiation to organometallic reactants.

**Main themes**

Intermediates reactivity. Study and determination of reaction mechanisms. Nucleophilic substitution. Mechanisms. Nucleophiles and electrophiles, Pearson's theory. Ion pairs. Stereochemical aspects and neighbouring groups participation. Super acid solutions. Reactivity of carbocations, carbanions, radicals, anion and cation radicals, carbenes. Non classical carbocations. Cationic and radical polycyclisations. Metal carbenoid. Birch-type reactions. Hammond and Curtin-Hammett postulates. Primary isotopic effect. Synthetic applications of these diverse notions. Pericyclic reactions. Diels-Alder cycloadditions. Sigmatropic rearrangements.

**Other credits in programs**

<b>CHIM21</b>	Première licence en sciences chimiques	(5 credits)	Mandatory
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