

UE Organic chemistry 2

 ECTS
6 credits

 Component
UFR Chimie-
Biologie

- > **Teaching language(s):** English
- > **Open to exchange students:** Yes
- > **Code d'export Apogée:** YACH8U22

Presentation

Description

This course is divided in four main parts. The first part focusses on physical chemistry, necessary for a good understanding of chemical transformation. In the second part the chemistry of enolates will be detailed through the study of major reactions: alkylation, aldol, Claisen and 1-4 addition reactions. In the third part, pericyclic reactions will be studied (electrocyclic, cycloaddition and sigmatropic reactions). Finally the chemistry of free radicals and carbenes will be introduced. The course includes formal lectures and tutorial classes.

Course parts

UE Organic chemistry 2 - TD	Tutorials (TD)	20h
UE Organic chemistry 2 - CM	Lectures (CM)	30h

Recommended prerequisites

Organic chemistry I (taught in M1 first semester) or equivalent knowledge of organic chemistry bases.

Period : Semester 8

Skills

Knowledge of common reactions in organic chemistry, of their mechanism and of their uses in total synthesis.

Bibliography

Details:

I. General Backgrounds

Acids and bases, thermodynamics and kinetics applied to organic reactions...

II. Enolate Chemistry Alkylation reaction, aldol condensation, acylation reactions, 1,4-additions

III. Pericyclic Reactions Woodward Hoffmann rules, cycloadditions (Diels-Alder, [2+2], ...), sigmatropic rearrangements

IV. Reactive Intermediates Free radicals, carbenes

V. Organometallics

Useful info

Contacts

Program director

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Place

› Grenoble

Campus

› Grenoble - University campus