

Course Descriptions None 2024-2025

Course Title Organic Chemistry
Course Code CEN2001
ECTS Credits 5,0
Assessment Whole/Half Grades

Period	Start	End	Mon	Tue	Wed	Thu	Fri
4	3-2-2025	30-3-2025					

Level no level

Coordinator Hanne Diliën For more information: hanne.dilien@maastrichtuniversity.nl

Language of instruction English

Goals

- * To give the ability to recognize and name common organic compounds.
- * To know the basic physical and chemical properties of common organic compounds.
- * To understand stereochemistry and its impact on the properties and applications of organic molecules.
- * To enable you to understand the most important organic reactions and be able to apply these reactions to obtain well defined organic compounds.

Description

This course focuses on the basic concepts of organic chemistry. In the first part of the course, important fundamental topics, such as atomic theory, bonding theory, hybridization, molecular orbital theory and resonance will be discussed. A special topic will be stereochemistry, which is an essential topic in organic chemistry and the life sciences, since stereochemistry often determines the activity of biological compounds or medicines. Subsequently, the course continues with an introduction into reactivity of organic molecules. Focus will be on a selection of fundamental organic reactions, which form the basis for a wide array of other organic reactions. To this end, a logical review will be provided of the reactivity of the most important functional groups, as applied in organic synthesis.

Literature Klein; 'Organic Chemistry'; 3rd edition; Wiley (ISBN: 9781118452288/978-1119110477)

Prerequisites To start the organic chemistry course students need a basic chemistry background in nomenclature, VSEPR theory, Lewis structures, hybridization (sp, sp², sp³), polarity, ...

Keywords

Teaching methods Lecture

Assessment methods Written Exam

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation