## Module title

**Organic Chemistry 2**  
**Abbreviation**  
o8-OC2-102-m01

## Module coordinator

holder of the Chair of Physically Organic Chemistry

## Module offered by

Institute of Organic Chemistry

## ECTS

9

## Method of grading

Numerical grade

## Only after succ. compl. of module(s)

o8-OC1

## Duration

1 semester

## Module level

Undergraduate

## Other prerequisites

Admission prerequisite to assessment: successful completion of exercises in the respective classes as specified at the beginning of the course (usually 70% of exercises to be successfully completed) as well as regular attendance of exercises (usually a maximum of 2 incidents of unexcused absence).

## Contents

This module introduces students to the rules of aromaticity and discusses specific reactions of aromatics. Using the example of carbonyl compounds, it extends the students’ knowledge of substitution, elimination and addition reactions to complex reaction mechanisms. The course also focuses on oxidation and reduction reactions as well as rearrangement. In addition, it introduces students to the spectroscopic methods of infrared spectroscopy, mass spectrometry and NMR spectroscopy.

## Intended learning outcomes

Students have become familiar with the criteria for aromaticity. They can analyse the varying reactivity of carbonyl compounds. They are able to describe specific reactions of carbonyls and aromatics. For that purpose, they can plan and formulate multi-stage syntheses with complex reaction mechanisms and can transfer them to unknown reactions. Students are able to describe important spectroscopic methods, to evaluate a spectrum and to draw conclusions regarding the molecular structure.

## Courses

(V + V + Ü) (no information on SWS (weekly contact hours) and course language available)

## Method of assessment

(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)

- a) 1 to 3 written examinations (1 written examination: approx. 90 minutes; 2 written examinations: approx. 60 or 90 minutes each; 3 written examinations: approx. 60 minutes each) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes)

Language of assessment: German, English

## Allocation of places

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## Additional information

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## Referred to in LPO I (examination regulations for teaching-degree programmes)

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## Module appears in

- Bachelor’ degree (1 major) Biochemistry (2011)
- Bachelor’ degree (1 major) Biochemistry (2013)
- Bachelor’ degree (1 major) Chemistry (2010)
- Bachelor’ degree (1 major) Mathematics (2012)
- Bachelor’ degree (1 major) Mathematics (2013)
- Bachelor’ degree (1 major) Computational Mathematics (2012)
- Bachelor’ degree (1 major) Computational Mathematics (2013)
- Bachelor’ degree (1 major) FOKUS Chemistry (2011)