

Modulbezeichnung: Organic chemistry (CM2-OC) 15 ECTS
(Organic chemistry)

Modulverantwortliche/r: Andreas Hirsch

Lehrende: Walter Bauer, Andreas Hirsch, Svetlana Tsogoeva

Startsemester: SS 2017

Dauer: 2 Semester

Turnus: halbjährlich (WS+SS)

Präsenzzeit: 225 Std.

Eigenstudium: 225 Std.

Sprache: Englisch

Lehrveranstaltungen:

A. Advanced Organic Chemistry I (2L, 1S), WS

Advanced Organic Chemistry I - Synthesis and Catalysis/Fortgeschrittene Organische Chemie I - Synthese und Katalyse (WS 2017/2018, Vorlesung, 2 SWS, Svetlana Tsogoeva et al.)

B. Advanced Organic Chemistry II (2L, 1S), SS

Molekülsynthesen: Funktionale pi-Systeme/Functional pi-systems (SS 2017, Vorlesung, 2 SWS, Andreas Hirsch et al.)

Current issues in Organic Chemistry I/II (Advanced Organic Chemistry II) (SS 2017, Seminar, 2 SWS, Andreas Hirsch et al.)

C1. Advanced Organic Chemistry Lab Course (7Lab)

Attendance of lab course is compulsory!

Advanced Organic Chemistry - Practical (SS 2017, Praktikum, 7 SWS, Andreas Hirsch)

Advanced Organic Chemistry - Practical / Fortgeschrittenenpraktikum Organische Synthesechemie (WS 2017/2018, Praktikum, 7 SWS, Svetlana Tsogoeva et al.)

C2. Advanced Spectroscopic Methods (2S), SS

Advanced methods in spectroscopy (SS 2017, Seminar, 2 SWS, Walter Bauer)

Inhalt:

- Introduction to current research topics of Organic Chemistry
- establishing fundamental knowledge required for appreciation of more specialized topics in Organic Chemistry; the expected standard is based on a research oriented Masters program
- intensifying practical experience in selected topics of preparative Organic Chemistry on an advanced skill level

Lernziele und Kompetenzen:

Students

- acquire knowledge and expertise required for theoretical evaluation and practical handling of novel organic compounds
- prepare and characterize compounds not previously introduced in mandatory practical courses
- apply and evaluate the guiding principles of Organic Chemistry to practical-preparative problems
- manage and apply the fundamental safety regulations important to handling hazardous compounds and instruct other co-workers in relevant safety topics

Verwendbarkeit des Moduls / Einpassung in den Musterstudienplan:

Das Modul ist im Kontext der folgenden Studienfächer/Vertiefungsrichtungen verwendbar:

[1] Chemie (Master of Science): 1-2. Semester

(Po-Vers. 2009 | NatFak | Chemie (Master of Science) | Kernmodul | Organische Chemie)

Studien-/Prüfungsleistungen:

Mündliche Prüfung Organische Chemie (Prüfungsnummer: 65101)

(englische Bezeichnung: Oral Examination on Organic Chemistry)

Prüfungsleistung, mündliche Prüfung, Dauer (in Minuten): 45

Anteil an der Berechnung der Modulnote: 100%

weitere Erläuterungen:

Oral examination 45 (O45), 2 examiners

A: LEC (SL)

B: LEC (SL)

C: LAB (SL) + Ex (SL)

Grading procedure: Result of the oral examination (100%)

Erstablingung: WS 2017/2018, 1. Wdh.: SS 2018

1. Prüfer: Andreas Hirsch

Organisatorisches:

Module frequency: A. winter term, B. summer term, C.winter and summer term

Bemerkungen:

Module compatibility: M.Sc. Chemie / M.Sc. Molecular Science (Elective module)