

KO 5001
Organic Chemistry – Reactivity and Structure
Autumn term 2024 (Schedule 230604)

Types of sessions and general schedule:

Lectures	A501	Morning: 09.15 – 12.00 <i>or</i> Afternoon: 13:15 – 16:00
Seminars	online	Morning: 09.15 – 12.00 <i>or</i> 14.00 – 17.00
Tutoring (<i>appointment only</i>)		Morning: 09.15 – 12.00 <i>or</i> Afternoon: 13:15 – 18:00
Laboratory sessions (compulsory)	A668/K343	Full day: 09:15 – 18:00 <i>or</i> Afternoon: 13:15 – 18:00

Lecturers:

Göran Widmalm (GW) – examiner & SPEK lecturer	08 16 3742	goran.widmalm@su.se
Biswanath Das (BD) – REAK lecturer	073 600 2256	biswanath.das@su.se

Teaching Assistants (TA):

Majken Raeder (MR)	majken.raeder@su.se
Alexandru Pastole (AP)	alexandru.postole@su.se

Course literature:

- **[CGW]** Clayden, Greeves & Warren: Organic Chemistry; 2nd Edition, Oxford University Press 2012 (ISBN 978-0-19-927029-3) *or* Clayden, Greeves, Warren & Wothers: Organic Chemistry, Oxford University Press 2001 (ISBN 978-0-19-850346-0)
- **[FLM]** L.D. Field, H. L. Li, A. M. Magill: Organic Structures from Spectra, John Wiley & Sons, 6th edition (ISBN: 978-1-119-52480-9)
- Handouts from lecturers and teaching assistant

Demands to pass the theory course:

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|----------------------------------------------------------|------------------------------|
| • Passed exam in nomenclature | > 50% of the points required |
| • Passed exam part REAK (reactions & mechanisms) | > 50% of the points required |
| • Passed exam part SPEK (spectroscopy theory & analysis) | > 50% of the points required |

Demands to pass the laboratory course:

- Passed exam in nomenclature (30% of the points required)
- Passed exam in safety (100% of the points required)
- Passed all lab reports
- Taken part in lab report writing sessions
- Taken part in lab presentation
- Taken part in lab cleaning

Schedule for KO 5001
Organic Chemistry – Reactivity and Structure
Autumn term 2023

Week 36

Mon	Sept 2	09.15 – 09.45 Course introduction	GW,BD,MR,APA	A501
		10.00 – 12.00 Lecture REAK-1	BD	A501
Tue	3	09.15 – 12.00 Lecture SPEK-1	GW	A501
		13.15 – 17.00 <i>Tutoring (optional, per appointment)</i>	MR/AP	A501
Wed	4	09.15 – 12.00 Lecture SPEK-2	GW	A501
Wed	4	14.00 – 17.00 Exam: Nomenclature and safety	MR/AP	online
Thu	5	09.15 – 12.00 Lecture SPEK-3	GW	A501
Thu		14.00 – 17.00 <i>Re-sit exam: Nomenclature and safety</i>	MR/AP	online
Fri	6	09.15 – 12.00 Lecture SPEK-4	GW	A501
		13.15 – 16.00 Lab introduction	MR/AP	A501

Week 37

Mon	Sept 9	09.15 – 18.00 Self-studies		
Tue	10	09.15 – 12.00 Lecture REAK-2	BD	A501
Wed	11	13.15 – 18.00 LAB 1 - ChemDraw and MNova software G1&G2	MR/AP	K343
Thu	12	09.15 – 12.00 Lecture REAK-3	BD	A501
		14.00 – 17.00 SPEK Interpretation NMR spectra	GW(TA)	online
Fri	13	13.15 – 18.00 LAB 2 - separation G1	MR/AP	A668

Week 38

Mon	Sept 16	9.15 – 18.00 LAB 2 - separation G2	MR/AP	A668
Tue	17	9.15 – 18.00 LAB 2 - separation G1	MR/AP	A668
Wed	18	09.15 – 12.00 Lecture REAK-3	BD	A501
Wed	18	13.15 – 18.00 LAB 2 - separation G2	MR/AP	A668
Thu	19	13.15 – 18.00 LAB 2 - separation G1	MR/AP	A668
Fri	20	09.15 – 12.00 REAK Seminar 1	BD	online
Fri	20	13.15 – 18.00 LAB report workshop 1 G1&G2	MR/AP	K343

Week 39

Mon	Sept 23	09.15 – 12.00 Lecture REAK-4	BD	A501
		13.15 – 18.00 LAB 2 - separation G2	MR/AP	A668
Tue	24	09.15 – 18.00 LAB 3 - banana oil G1	MR/AP	A668
Wed	25	09.15 – 18.00 LAB 3 - banana oil G2	MR/AP	A668
Thu	26	09.15 – 12.00 LAB presentations	MR/AP	A501
Fri	27	09.15 – 12.00 SPEK Interpretation NMR spectra	AP(MR)	online

Week 40

Mon	Sept 30	09.15 – 12.00 Lecture REAK-5	BD	A501
Tue	Oct 1	09.15 – 12.00 SPEK Interpretation NMR spectra	MR(AP)	online
Wed	2	09.15 – 18.00 LAB 4 - Friedel-Crafts synthesis G1	MR/AP	A668
Thu	3	09.15 – 12.00 REAK Seminar 2	BD	online
Fri	4	09.15 – 18.00 LAB 4 - Friedel-Crafts synthesis G2	MR/AP	A668

Week 41

Mon	Oct 7	09.15 – 12.00 <i>Tutoring (optional, per appointment)</i>	GW	A627/A501
Tue	8	09.00 – 14.00 Exam: SPEK	MR/AP	K433-K439
Wed	9	09.15 – 18.00 LAB 5 - ibuprofen intermediate synthesis G1	MR/AP	A668
Thu	10	09.15 – 12.00 Lecture REAK-6	BD	A501
Fri	11	09.15 – 12.00 Lecture REAK-7	BD	A501
		13.15 – 18.00 LAB Extra time G1	MR/AP	A668

Week 42

Mon	Oct 14	09.15 – 18.00 LAB 5 - ibuprofen intermediate synthesis G2	MR/AP	A668
Tue	15	09.15 – 12.00 Lecture REAK-8	BD	A501
		13.15 – 18.00 LAB Extra time G2	MR/AP	A668
Wed	16	09.15 – 12.00 LAB cleaning G1&G2	MR/AP	A668
Thu	17	09.15 – 12.00 Lecture REAK-9	BD	A501
		13.15 – 18.00 LAB report workshop 2	MR/AP	K343
Fri	18	09.15 – 12.00 Lecture REAK-10	BD	A501

Week 43					
Mon	Oct 21	09.15 – 12.00	Lecture REAK Seminar 3	BD	Online
Tue	22	09.15 – 18.00	Self-studies		
Wed	23	09.15 – 18.00	Self-studies		
Thu	24	09.15 – 18.00	Self-studies		
Fri	25		DEADLINE reports		
Week 44					
Mon	Oct 28	09.15 – 12.00	REAK exam practice	BD	A501
Tue	29	09.15 – 12.00	<i>Tutoring (optional, per appointment)</i>	BD	A529/A501
Wed	30	09.15 – 18.00	Self-studies		
Thu	31	09.00– 14.00	Exam: REAK	MR/AP	K441-K447
Fri	Nov 1				
Week 46					
Wed	Nov 20	13.00 – 18.00	Re-exam REAK LADOK registration required	MR/AP	K441-K447
Week 49					
Mon	Dec 2	13.00 – 18.00	Re-exam SPEK LADOK registration required	MR/AP	K441-K447

IMPORTANT: The deadline for all the laboratory reports is indicated above.

After the course period the reports will be corrected whenever the assistants have the time, and a fast response is therefore not warranted. To avoid disappointment and curricular issues, it is important to keep the set deadline for the reports.

Appointment is required to participate in the **tutoring sessions** scheduled. Please kindly use email to either GW or BD 24 h before the scheduled seminar indicating to communicate your intention of using this resource.