KO 5001
Organic Chemistry – Reactivity and Structure
Autumn term 2025 (Schedule 250519)

Types of sessions and general schedule:

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

• 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 presentation

• Taken part in lab cleaning

Schedule for KO5001
Organic Chemistry – Reactivity and Structure
Autumn term 2025 (schedule of 250509)

Week 36					
Mon	**Sep 1**	09.15 – 09.45	Course introduction	GW,BD,TAs	A501
		10.00 – 12.00	Lecture REAK-1	BD	A501
Tue	2	09.15 – 12.00	Lecture SPEK-1	GW	A501
		13.15 – 17.00	*Tutoring (optional, per appointment)*	TA	A501
Wed	3	09.15 – 12.00	Lecture SPEK-2	GW	A501
Wed	**3**	**14.00 – 17.00**	**Exam: Nomenclature and safety**	**TA**	**online**
Thu	4	09.15 – 12.00	Lecture SPEK-3	GW	A501
Thu	4	14.00 – 17.00	*Re-sit exam: Nomenclature and safety*	TA	online
Fri	5	09.15 – 12.00	Lecture SPEK-4	GW	A501
		13.15 – 16.00	Lab introduction	TA	A501
Week 37					
Mon	Sep 8	09.15 – 12.00	Lecture REAK-2	BD	A501
Mon	8	13.15 – 18.00	LAB 1 - ChemDraw and MNova software G1-G3	TA	K343
Tue	9	09.15 – 12.00	Lecture REAK-3	BD	A501
Tue	9	14.00 – 17.00	SPEK Interpretation NMR spectra	TA	online
Wed	10	9.15 – 18.00	LAB 2 - separation G1	TA	A668
Thu	11	9.15 – 18.00	LAB 2 - separation G2	TA	A668
Fri	12	9.15 – 18.00	LAB 2 - separation G3	TA	A668
Week 38					
Mon	Sep 15	09.15 – 12.00	Lecture REAK-4	BD	A501
Mon	15	13.15 – 18.00	LAB 2 - separation G1	TA	A668
Tue	16	13.15 – 18.00	LAB 2 - separation G2	TA	A668
Wed	17	09.15 – 12.00	Lecture REAK-5	BD	A501
Wed	17	13.15 – 18.00	LAB 2 - separation G3	TA	A668
Thu	18	10:00 – 12.00	REAK Seminar 1	BD	online
Thu	18	13.15 – 18.00	LAB report workshop 1 G1-G3	TA	K343
Fri	19	09.15 – 12.00	SPEK Interpretation NMR spectra	TA	online
Week 39					
Mon	Sep 22	09.15 – 18.00	LAB 3 - banana oil G1	TA	A668
Tue	23	09.15 – 18.00	LAB 3 - banana oil G2	TA	A668
Wed	24	09.15 – 18.00	LAB 3 - banana oil G3	TA	A668
Thu	**25**	**09.15 – 12.00**	**LAB presentations**	TA	**A501**
	25	14.00 – 17.00	SPEK Interpretation NMR spectra	TA	online
Fri	26	09.15 – 12.00	*Tutoring (optional, per appointment)*	GW	A501/online
Week 40					
Mon	**Sep 29**	**09.00 – 14.00**	**Exam: SPEK**	**TA**	**K433-K439**
Tue	30	09.15 – 12.00	Lecture REAK-6	BD	A501
Wed	**Oct 1**	09.15 – 18.00	LAB 4 - Friedel-Crafts synthesis G1	TA	A668
Thu	2	09.15 – 18.00	LAB 4 - Friedel-Crafts synthesis G2	TA	A668
Fri	3	09.15 – 18.00	LAB 4 - Friedel-Crafts synthesis G3	TA	A668
Week 41					
Mon	6	09.15 – 12.00	Lecture REAK-7	BD	A501
Tue	7	09.15 – 18.00	LAB 5 - ibuprofen intermediate synthesis G1	TA	A668
Wed	8	09.15 – 18.00	LAB 5 - ibuprofen intermediate synthesis G2	TA	A668
Thu	9	09.15 – 18.00	LAB 5 - ibuprofen intermediate synthesis G3	TA	A668
Fri	10	09.15 – 12.00	Lecture REAK-8	BD	A501
		13.15 – 18.00	LAB Extra time G1	TA	A668
Week 42					
Mon	Oct 13	13.15 – 18.00	LAB Extra time G2	TA	A668
Tue	14	09.15 – 12.00	Lecture REAK-9	BD	A501
		13.15 – 18.00	LAB Extra time G3	TA	A668
Wed	15	09.15 – 18.00	LAB cleaning G1-G3	TA	A668
Thu	16	09.15 – 12.00	Lecture REAK-10	BD	A501
		13.15 – 18.00	LAB report workshop 2	TA	K343

Fri	17	09.15 – 12.00	Lecture REAK-10	BD	A501
Week 43					
Mon	Oct 20	10:00 – 12.00	Lecture REAK Seminar 2	BD	Online
Tue	21	09.15 – 18.00	Self-studies		
Wed	22	09.15 – 18.00	Self-studies		
Thu	23	09.15 – 18.00	Self-studies		
Fri	**24**		**DEADLINE reports**		
Week 44					
Mon	Oct 27	10:00 – 12.00	REAK exam practice	BD	A501
Tue	28	10:00 – 12.00	*Tutoring (optional, per appointment)*	BD	A629/A501
Wed	29	09.15 – 18.00	Self-studies		
Thu	**30**	**09.00 – 14.00**	**Exam: REAK**	**TA**	**K433-K439**
Fri	31	09.15 – 18.00	Finalizing reports		
Week 46					
Day	**Nov 12**	**13.00 – 18.00**	**Re-exam SPEK** LADOK registration required	**TA**	**K433-K439**
Week 47					
Day	**Nov 19**	**13.00 – 18.00**	**Re-exam REAK** LADOK registration required	**TA**	**K433-K439**

IMPORTANT: The deadline for handing in of 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 waranted. 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.