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 *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 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:

• 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,AP	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	*Tutoring (optional, per appointment)*	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	*Re-sit exam: Nomenclature and safety*	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	Sep 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	Sep 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	Sep 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	Sep 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
		13.00 – 17.00	*Tutoring (optional, per appointment)*	GW	A501/Online
Fri	4	09.15 – 18.00	LAB 4 - Friedel-Crafts synthesis G2	MR/AP	A668
Week 41					
Mon	**Oct 7**	**09.15 – 14.15**	**Exam: SPEK**	**MR/AP**	**K438**
Tue	8				
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	*Tutoring (optional, per appointment)*	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**	**MR/AP**	**K441-K447**
			LADOK registration required		
Week 49					
Mon	**Dec 2**	**13.00 – 18.00**	**Re-exam SPEK**	**MR/AP**	**K441-K447**
			LADOK registration required		

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 waranteed. 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.