

Schedule for KO7010 Advanced Organic Synthesis, fall 2027

Department of Organic Chemistry, Stockholm University

	W. 36 (31/8 – 4/9)	W. 37 (7/9 – 11/9)	W. 38 (14 – 18/9)	W. 39 (21 – 25/9)	W. 40 (28/9 – 2/10)
Mon 09.15-11:45 12.45-(18)	Intro (PA), Lecture 1 Bonding (BO) Info Master prog (GW) 12:45 Lab info, Col chromatography, (Ass)	Lecture 4 Reduction (PA) Theoretical lab exam (Ass) SciFinder search (C513) Hand in lab report	Lecture 7 Rearrangements (PA) Laboratory exercise	Lecture 10 C=O (BO) Laboratory exercise	Lecture 13 Phos & Sulfur (PA) Laboratory exercise
Tue 09.15-11:45 12.45-(18)	Safety exam (A507) Fo-pres 3-4st 12:45-14:00 Intro to ChemDraw& Mestrenova Lab report writing (C513)	Lecture 5 Reduction (PA) Fo-pres 3-4st 12:45-14:00 <i>Seminar preparation</i>	Lecture 8 C=O (BO) Problems 2, (PA)	Laboratory exercise Laboratory exercise	Laboratory exercise Laboratory exercise
Wed 09.15-11:45 12.45-(18)	Lecture 2 Oxidation (BO) Laboratory exercise NMR intro	Short synth. Presentations group 1, 10-12 group 2, 13-15	Laboratory exercise Laboratory exercise	Lecture 11 Heterocycles (PA) Problems 3, (BO)	Laboratory exercise / Synthesis seminar (group 1) Problems 4, (PA)
Thu 09.15-11:45 12.45-(18)	Laboratory exercise NMR intro Laboratory exercise NMR intro	Laboratory exercise Laboratory exercise	Laboratory exercise Laboratory exercise	Lecture 12 Boron & Silicon (PA) Laboratory exercise	Lecture 14 Enolates (BO) Laboratory exercise / Synthesis seminar (group 2)
Fri 09.15-11:45 12.45-(18)	Lecture 3 Oxidation (BO) Laboratory exercise	Lecture 6 Rearrangements (PA) Problems 1 (BO) Fo-pres (BO)	Lecture 9 C=O (BO) Laboratory exercise	<i>Seminar preparation</i> Laboratory exercise 12:45-(18)	Laboratory exercise Laboratory exercise

	W. 41 (5/10– 9/10)	W. 42 (12/10– 16/10)	W. 43 (19/10 – 23/10)	W. 44 (26/10 – 30/10)	W. 45 (2/11)
Mon 09.15-11:45 12.45-(18)	Lecture 15 Enolates (BO) Laboratory exercise	Lecture 18 Trans. Metals (PA) Laboratory exercise	Lecture 21 Strategy (PA) Laboratory exercise	Hand in final synthesis report <i>Seminar preparation/individual studies</i>	Final synthesis presentation group 1, 09-12 group 2, 13-16
Tue 09.15-11:45 12.45-(18)	Lecture 16 Enolates (BO) Laboratory exercise	Lecture 19 Pericyclic rxns (BO) <i>Seminar preparation</i>	Laboratory exercise Laboratory exercise	Problem solving (PA) <i>Seminar preparation/individual studies</i>	
Wed 09.15-11:45 12.45-(18)	Laboratory exercise Laboratory exercise	Synthesis seminar (group 1) Laboratory exercise	Lecture 22 Long synth. (PA) Problem solving (BO)	<i>Seminar preparation/individual studies</i>	
Thu 09.15-11:45 12.45-(18)	Laboratory exercise Laboratory exercise	Laboratory exercise Synthesis seminar (group 2)	Laboratory exercise Laboratory exercise	Theory exam (09-14) K441-447	
Fri 09.15-11:45 12.45-(18)	Lecture 17 Trans. Metals (PA) Problems 5, (BO)	Lecture 20 Pericyclic rxns (BO) Problems 6, (PA)	Practical lab exam (all)! Lab-cleaning MANDATORY!	<i>Seminar preparation/individual studies</i>	

Literature: Organic Chemistry 2nd Ed: Clayden, Greeves and Warren, Oxford University Press, 2012 + lecture handouts and notes.

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All teaching in **A507**, except for laboratory exercises that are in **K422 & K434** and SciFinder search in room **C513**.

Last dates for submitting lab reports: Monday September 7 (the short synthesis), Monday October 26 (the multistep synthesis)

* course responsible and examiner