Schedule for KO7010 Advanced Organic Synthesis, fall 2024

Department of Organic Chemistry, Stockholm University

	W. 36 (2/9 – 6/9)	W. 37 (9/9 – 13/9)	W. 38 (16 – 20/9)	W. 39 (23 – 27/9)	W. 40 (30/9 – 4/10)
Mon 09.15-11:45 12.45-(18)	Intro (PA), Lecture 1 Bonding (BO) Lab info (PA, Ass)	Lecture 4 Oxidation (BO) **Theoretical lab exam** (Ass) SciFinder search (K343) Hand in lab-report	Laboratory exercise Laboratory exercise	Lecture 10 C=O (BO) Laboratory exercise	Laboratory exercise Laboratory exercise
Tue 09.15-11:45 12.45-(18)	Lecture 2 Reduction (PA) **Intro to ChemDraw&Mestrenova** **Safety exam** (Ass)	Lecture 5 Oxidation (BO) *Seminar preparation/individual studies*	Lecture 7 Rearrangements (PA) Laboratory exercise	Laboratory exercise Laboratory exercise	Lecture 12 Boron & Silicon (PA) Laboratory exercise
Wed 09.15-11:45 12.45-(18)	**Intro to column chromatography** Laboratory exercise Laboratory exercise	**Long synthesis intro** (all) **Short synth. presentations** (all) (12:45-)	Lecture 8 Rearrangements (PA) Laboratory exercise	**Synthesis seminar** (all) Laboratory exercise	Laboratory exercise Laboratory exercise
Thu 09.15-11:45 12.45-(18)	Lecture 3 Reduction (PA) Laboratory exercise	Lecture 6 Heterocycles (PA) Problems, research info 1 XX (PA)	Lecture 9 C=O (BO) Problems, research info 2 XX (BO)	Laboratory exercise Laboratory exercise	Lecture 13 Phosph. & Sulfur, (PA) Problems, research info 4 XX (PA)
Fri 09.15-11:45 12.45-(18)	Laboratory exercise Laboratory exercise	Laboratory exercise Laboratory exercise	Laboratory exercise Laboratory exercise	Lecture 11 C=O (BO) *Problems, research info 3 XX (BO)*	Laboratory exercise Laboratory exercise

	W. 41 (7/10– 11/10)	W. 42 (14/10– 18/10)	W. 43 (21/10 – 25/10)	W. 44 (28/10 – 1/11)
Mon 09.15-11:45 12.45-(18)	Lecture 14 Enolates (BO) Laboratory exercise	Laboratory exercise Laboratory exercise	Lecture 20 Pericyclic rxns (BO) Laboratory exercise	Problem solving (BO) *Seminar preparation/individual studies*
Tue 09.15-11:45 12.45-(18)	Lecture 15 Enolates (BO) Laboratory exercise	Lecture 17 Trans. Metals (PA) *Seminar preparation*	Lecture 21 Strategy (PA) Laboratory exercise	Problem solving (PA) *Seminar preparation/individual studies*
Wed 09.15-11:45 12.45-(18)	Laboratory exercise Laboratory exercise	Lecture 18 Trans. Metals (PA) Problem, research info 6 XX (PA)	Laboratory exercise Laboratory exercise	*Seminar preparation/individual studies*
Thu 09.15-11:45 12.45-(18)	Laboratory exercise Laboratory exercise	**Synthesis seminar** (all) Lab report writing (K343)	Lecture 22 Long synth. (PA) Laboratory exercise	**Theory exam (9-14)**
Fri 09.15-11:45 12.45-(18)	Lecture 16 Enolates (BO) Problems, research info 5 XX (BO)	Lecture 19 Pericyclic rxns (BO) Laboratory exercise	**Practical lab exam (all)!** **Lab-cleaning MANDATORY!**	**Multistep synthesis presentations** (all) **Hand in final synthesis report**

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 **K343**.

* course responsible and examiner

Last dates for submitting lab reports: Monday September 9 (the short syntheses), Friday November 1 (the multistep synthesis)

* course responsible and examiner