KO7015 Sustainable Organic Chemistry (7.5 ECTS)

Course outline and schedule 2025

day Week	Monday	Tuesday	Wednesday	Thursday	Friday
8 02/17-02/21	**-**	**-**	**-**	**L1**	**L2**
9 02/24-02/28	**L3** **E1**	**L4**	**L5** **E1**	**L6**	**E2**
10 03/03-03/07	**L7**	**L8**	**L9**	**E2**	**E2**
11 03/10-03/14	**L10**	**L11**	**E2**	**Questions**	**E2**
12 03/17-03/21		**E2**			**Exam**

L = lectures; E = exercises

Teachers:

(JS)	Joseph Samec (course responsible)	joseph.samec@su.se
(BMM)	Belén Martin-Matute	belen.martin.matute@su.se

L: BMM, JS, MJ (AstraZeneca)
E: JS

Literature:
Course book: Green Chemistry and Catalysis, Roger A. Sheldon, Isabel W. C. E. Arends, Ulf Hanefeld, ISBN:9783527307159 |Online ISBN:9783527611003 |
available from SU library as e-book (PDF)

Additional course material
Lecture slides
Reading material to be distributed

Lectures

Day	Date	Time	Room	AM (9:15-12:00)
Thu	Feb-20	09:15-12	A507	L1 Historical background of importance of raw material for organic chemistry. (JS)
Fri	Feb-21	09:15-12	A507	L2 Possible raw material for organic chemistry beyond crude oil. (JS)
Mon	Feb-24	09:15-12	A507	L3 How is waste generated? stoichiometry, solvents, work-ups, purifications. (JS)
Tue	Feb-25	09:15-12	A507	L4: Introduction to LCA (JS)
Wed	Feb-26	09:15-12	A507	L5: Attributional LCA (JS)
Thu	Feb-27	09:15-12	A507	L6: Consequential LCA (JS)
Mon	Mar-03	09:15-12	A507	L7 Catalysis for the synthesis of organic compounds (BMM)
Tue	Mar-04	13-15	A507	L8: Heterogeneous catalysis for synthetic organic chemistry (BMM)
Wed	Mar-05	09:15-12	A507	L9: Green Chemistry on C-H activation (MJ AZ)
Mon	Mar-10	09:15-12	A507	L10: Green approaches to asymmetric catalysis in organic synthesis (BMM)
Tue	Mar-11	09:15-12	A507	L11: Technologies for Green Organic Chemistry (BMM)
Thu	Mar-13	09:15-12	A507	Questions (JS; BMM)
Fri	Mar-21	09-14	A507	Exam

Exercises

Day	Date	Time	Room	
Mon	Feb-24	13-16	A507	E1 Metrics (JS)
Wed	Feb-26	13-16	A507	E1 Metrics (JS)
Fri	Feb-28	09:15-12	A507	E2 LCA (JS)
Thu	Mar-06	09:15-16	A507	E2 LCA (JS)
Fri	Mar-07	09:15-16	A507	E2 LCA (JS)
Wed	Mar-12	09:15-16	A507	E2 LCA (JS)
Fri	Mar-14	09:15-16	A507	E2 LCA (JS)
Tue	Mar-18	09:15-12	A507	E2 LCA (JS)