

CH-621(1)

**Perspectives in Modern Organic Chemistry (OCS) 1**

Cramer Nicolai, Vacat ., Zhu Jieping

Cursus	Sem.	Type
Chemistry and Chemical Engineering		Opt.

Language of teaching	English
Credits	1
Session	
Exam	Term paper
Workload	30h
<b>Hours</b>	<b>21</b>
Courses	7
Exercises	14
<b>Number of positions</b>	

**Frequency**

Every year

**Remark**

Next time Fall 2022

**Summary**

Total synthesis, Natural product, Green chemistry, Enantioselective synthesis, Organo-catalysis, Lewis acid, Transition-metal, Drug discovery

**Content**

Natural product, modern synthetic tools  
 C-C bond formation, C-heteroatom bond formation  
 Enantioselective synthesis  
 Lewis acid-catalyzed transformation  
 Transition metal-catalyzed transformation  
 Organocatalysis  
 Green chemistry  
 Drug development, Drug discovery  
 Interface of organic chemistry/biology, organic chemistry/bioorganic chemistry

**Keywords**

Total synthesis, Natural product, Green chemistry, Enantioselective synthesis, Organo-catalysis, Lewis acid, Transition-metal, Drug discovery

**Learning Prerequisites****Important concepts to start the course**

M2 level

**Resources****Websites**

- [https://www.epfl.ch/schools/sb/research/isic/news-events/organic\\_chemistry\\_seminars/](https://www.epfl.ch/schools/sb/research/isic/news-events/organic_chemistry_seminars/)