

CH-621(1)

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

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| <b>Cursus</b>                      | <b>Sem.</b> | <b>Type</b> |
|------------------------------------|-------------|-------------|
| Chemistry and Chemical Engineering |             | Opt.        |

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

**Frequency**

Every year

**Remark**

Next time: Fall 2021

**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

**Assessment methods**

Term paper

**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/)

