

CH-603

**Basic principles of drug action at the nervous system**

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Cursus	Sem.	Type
Chemistry and Chemical Engineering		Opt.
Neuroscience		Opt.

Language of teaching	English
Credits	1
Session	
Exam	Written
Workload	30h
<b>Hours</b>	<b>14</b>
Courses	14
<b>Number of positions</b>	<b>15</b>

**Frequency**

Every year

**Remark**

Room TBA (Rue Bugnon, Lausanne)

**Summary**

The aim of this course is two-fold: i) to describe the molecular properties of some important drug targets ii) to illustrate some applications of drugs active at the nervous system

**Content**

Basic Principles of drug action at the nervous system

- 1) Molecular pharmacology of ion channels
- 2) Pharmacology of pain
- 3) Pharmacology of GABA receptors
- 4) Anti-epileptic and local anesthetic drugs
- 5) Pharmacogenetics in psychiatry
- 6) Pharmacology of the central nervous system I
- 7) Pharmacology of the central nervous system II

**Note**

- 1) Molecular pharmacology of ion channels  
S. Kellenberger, March 11, 10h-12h
- 2) Pharmacology of pain  
S. Kellenberger, March 17, 10h-12h
- 5) Pharmacogenetics in psychiatry  
S. Crettol Wavre, March 18, 8h-10h
- 3) Pharmacology of GABA receptors  
S. Kellenberger, March 18, 10h-12h
- 4) Anti-epileptic and local anesthetic drugs  
S. Kellenberger, March 19, 8h-10h
- 6) Pharmacology of the central nervous system I  
P. Steullet, March 20, 8h-10h
- 7) Pharmacology of the central nervous system II  
P. Steullet, March 20, 10h-12h

**Keywords**

drug action

**Learning Prerequisites**

**Important concepts to start the course**

Basic knowledge of biochemistry, physiology and neurobiology

**Assessment methods**

Written research report on a topic chosen by the teacher

**Resources**

**Moodle Link**

- <https://go.epfl.ch/CH-603>