

CH-221

**Chemistry of elements s and p**

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Cursus	Sem.	Type
Chemistry and chemical engineering	BA3	Obl.

Language of teaching	English
Credits	2
Session	Winter
Semester	Fall
Exam	Written
Workload	60h
Weeks	14
Hours	<b>2 weekly</b>
Courses	2 weekly
Number of positions	

**Summary**

Introduction to the chemistry of the s & p elements of the periodic table.

**Content**

The course will be a "walk" through the periodic table with focus on the main group elements. This includes a brief history of the respective element, a description of the most important compounds (*syntheses, structures, physical properties and reactivities*) and a discussion of trends within the different groups.

**Learning Outcomes**

By the end of the course, the student must be able to:

- Recall general trends in the periodic table of elements.
- Recall methods for the synthesis of the s & p block elements.
- Recall the structures, the properties, applications, and the chemical reactivity of the s & p block elements.
- Differentiate the different allotropes of the s & p block elements.
- Derive the structure of compounds of the s & p block elements.
- Derive equations for reactions of compounds of the s & p block elements.
- Recall relevant oxidation states for the s & p block elements.

**Assessment methods**

Written exam

**Resources****Ressources en bibliothèque**

- [Inorganic Chemistry / Shriver](#)
- [Elements of the p Block / Shriver](#)
- [Nature's Building Blocks / Emsley](#)
- [Anorganische Chemie / Riedel](#)

**Websites**

- [http://scgc.epfl.ch/telechargement\\_cours\\_chimie](http://scgc.epfl.ch/telechargement_cours_chimie)