

# Course description

<b>Course abbreviation:</b>	KCH/ANOC1	<b>Page:</b>	1 / 3
<b>Course name:</b>	Inorganic Chemistry 1		
<b>Academic Year:</b>	2016/2017	<b>Printed:</b>	22.05.2018 10:16

<b>Department/Unit /</b>	KCH / ANOC1	<b>Academic Year</b>	2016/2017
<b>Title</b>	Inorganic Chemistry 1	<b>Type of completion</b>	Exam
<b>Accredited/Credits</b>	Yes, 4 Cred.	<b>Type of completion</b>	Combined
<b>Number of hours</b>	Přednáška 2 [Hours/Week]		
<b>Occ/max</b>	Status A      Status B      Status C	<b>Course credit prior to</b>	NO
<b>Summer semester</b>	38 / -      0 / 0      0 / 0	<b>Counted into average</b>	YES
<b>Winter semester</b>	2 / -      0 / -      0 / -	<b>Min. (B+C) students</b>	not determined
<b>Timetable</b>	Yes	<b>Repeated registration</b>	NO
<b>Language of instruction</b>	Czech	<b>Semester taught</b>	Winter, Summer
<b>Substituted course</b>	None	<b>Internship duration</b>	0
<b>Preclusive courses</b>	N/A		
<b>Prerequisite</b>	N/A		
<b>Informally recommended courses</b>	N/A		
<b>Courses depending on this Course</b>	N/A		

## Course objectives:

### Aims

The s- and p-elements and their basic compounds - properties, preparation, and use.

## Requirements on student

Evaluation of the subject as well as the exam grading is made according to the articles No 31 - 33 in the Regulations on Study and Examinations University of Ostrava

## Content

### Content

1. Periodic system of element and its regularities.
2. Hydrogen and its compounds (properties, production, preparation, reactivity).
3. Oxygen and its compounds (properties, production, preparation, reactivity).
4. The 1. group elements and their compounds (properties, production, preparation, reactivity).
5. The 2. group elements and their compounds (properties, production, preparation, reactivity).
6. The 13. group elements and their compounds (properties, production, preparation, reactivity).
7. The 14. group elements and their compounds (properties, production, preparation, reactivity).
8. The 14. group elements and their compounds (properties, production, preparation, reactivity).
9. The 15. group elements and their compounds (properties, production, preparation, reactivity).
10. The 15. group elements and their compounds (properties, production, preparation, reactivity).
11. The 16. group elements and their compounds (properties, production, preparation, reactivity).
12. The 17. group elements and their compounds (properties, production, preparation, reactivity).
13. The 18. group elements and their compounds (properties, production, preparation, reactivity).

## Prerequisites - other information about course preconditions

none

## Competences acquired

Competences

The students know properties of the s- and p-elements and their basic compounds. They understand relation between the element position in periodic system and its properties. They can describe production and preparation of the significant s- and p-elements and their compounds.

## Fields of study

## Guarantors and lecturers

- **Guarantors:** doc. RNDr. Václav Slovák, Ph.D.
- **Lecturer:** doc. RNDr. Václav Slovák, Ph.D.

## Literature

- **Basic:** Leško,J. - Tržil,J. - Štarha,R. *Anorganická chemie, VŠB-TU Ostrava,2000..*
- **Recommended:** Ondrejovič,G. a kol. *Anorganická chémie. Alfa Bratislava 1993..*
- **Recommended:** Housecroft E.H., Sharpe A.G. *Anorganická chemie. Praha, 2014.*
- **Recommended:** Cotton,F.A. - Wilkinson,G. *Anorganická chemie, Academia, Praha 1973..*
- **Recommended:** Březina, F., Kašpárek,F. Pastorek,R., Šindelář,Z. *Anorganická chemie, UP Olomouc 1997..*
- **Recommended:** Klikorka,J. Hájek,B. Votinský,J. *Obecná a anorganická chemie. SNTL, Alfa 1985..*
- **Recommended:** Gažo,J. a kol. *Všeobecná a anorganická chémie, Alfa, Bratislava, 1978..*

## Time requirements

Activities	Time requirements for activity [h]
Being present in classes	26
Preparation for an exam	64
Consultation of work with the teacher/tutor (incl. electronic)	10
<b>Total:</b>	<b>100</b>

## assessment methods

### professional knowledge

- Oral examination
- Written examination

## teaching methods

### professional knowledge

- Monologic (explanation, lecture, briefing)

## learning outcomes

### professional knowledge - knowledge resulting from the course:

- Competences
- The students know properties of the s- and p-elements and their basic compounds. They understand relation between the element position in periodic system and its properties. They can describe production and preparation of the significant s- and p-elements and their compounds.

## Course is included in study programmes:

Study Programme	Type of	Form of	Branch	Stage	St. plan	v. Year	Block	Status	R.year	R.
Chemistry	Bachelor	Full-time	Chemistry	1	2012	2016	Povinné předměty	A	1	LS
Chemistry	Bachelor	Full-time	Chemistry with Other Degree Specialization	1	2	2016	Povinné předměty	A	1	LS
Chemistry	Bachelor	Full-time	Chemistry with Other Degree Specialization	1	2014	2016	Povinné předměty	A	1	LS

Study Programme	Type of	Form of	Branch	Stage	St. plan v.	Year	Block	Status	R.year	R.
Physics	Bachelor	Full-time	Chemistry with Other Degree Specialization	1	2014	2016	Povinné předměty	A	1	LS

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