

Course description

Course abbreviation:	KCH/ANOC1	Page:	1 / 3
Course name:	Inorganic Chemistry 1		
Academic Year:	2016/2017	Printed:	26.09.2017 05:34

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

Studijní opory

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 chémia. 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 chémia, 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
Total:	100

assessment methods

professional knowledge

- Oral examination
- Written examination

prerequisite

professional knowledge

none

teaching methods

professional knowledge

Monologic (explanation, lecture, briefing)

learning outcomes

professional knowledge

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 předmety	A	1	LS

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