Course description

Department/Unit /	KCH / SANC2			**Academic Year**	2016/2017
Title	Seminar - Inorganic Chemistry 2			**Type of completion**	Pre-Exam Credit
Accredited/Credits	Yes, 1 Cred.			**Type of completion**	Combined
Number of hours	Seminar 1 [Hours/Week]				
Occ/max	Status A	Status B	Status C	**Course credit prior to**	NO
Summer semester	0 / -	0 / -	0 / -	**Counted into average**	NO
Winter semester	0 / 0	17 / -	0 / 0	**Min. (B+C) students**	not determined
Timetable	Yes			**Repeated registration**	NO
Language of instruction	Czech			**Semester taught**	Winter semester
Substituted course	None			**Internship duration**	0
Preclusive courses	KCH/ANOC2				
Prerequisite	N/A				
Informally recommended courses	N/A				
Courses depending on this Course	N/A				

Course objectives:

Koordinační sloučeniny.

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

1. Základní pojmy z chemie koordinačních sloučenin, koordinační číslo.
2. Stereochemie komplexů
3. Izomerie u komplexů
4. Test 1
5. Vazba v komplexech - teorie valenčních vazeb
6. Vazba v komplexech - teorie krystalového pole
7. Vazba v komplexech - důsledky štěpení d-orbitalů (stabilizační energie, magnetické vlastnosti, barevnost)
8. Test 2
9. Stabilita komplexů - celkové a konsekutivní konstanty stability
10. Faktory ovlivňující stabilitu komplexů
11. Komplexy s pi-akceptorovými ligandy, pi-komplexy
12. Kinetika a mechanismus reakcí komplexů.
13. Test 3

Prerequisites - other information about course preconditions

Competences acquired

orientuje se v problematice koordinačních sloučenin

Fields of study

Guarantors and lecturers

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

- **Seminar lecturer:** doc. RNDr. Václav Slovák, Ph.D.

Literature

- **Basic:** GREENWOOD N. N., EARNSHAW A. *Chemie prvků*. Informatorium Praha, 1993.
- **Basic:** BŘEZINA F., PASTOREK R. *Koordinační chemie.Skripta UP Olomouc.*. 1991.
- **Recommended:** Housecroft E.H., Sharpe A.G. *Anorganická chemie*. Praha, 2014.

Time requirements

Activities	Time requirements for activity [h]
Being present in classes	13
Preparation for test	13
Total:	**26**

assessment methods

professional knowledge

Continuous analysis of student´s achievements

teaching methods

professional knowledge

Dialogic (discussion, dialogue, brainstorming)

learning outcomes

professional knowledge - knowledge resulting from the course:

orientuje se v problematice koordinačních sloučenin

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	Povinně volitelné předměty	B	2	ZS
Chemistry	Bachelor	Full-time	Chemistry with Other Degree Specialization	1	2	2016	Povinně volitelné předměty	B	2	ZS
Chemistry	Bachelor	Full-time	Chemistry with Other Degree Specialization	1	2014	2016	Povinně volitelné předměty	B	2	ZS
Physics	Bachelor	Full-time	Chemistry with Other Degree Specialization	1	2014	2016	Povinně volitelné předměty	B	2	ZS