

Detailed course description (SUBJECT CARD)

Course title: Advanced Inorganic Chemistry

Course code:

Classification of a course group:

Course type: basic / ~~field-related~~ / ~~general~~ / ~~specialty-related~~*
obligatory / ~~elective~~*

Field of study: Industrial and Engineering Chemistry

Level of study: first-cycle / ~~second-cycle~~*

Profile of study: general academic / ~~practical~~*

Mode of study: full-time programme / ~~part-time programme~~*

Specialty (specialisation):

Year of study: II

Semester: III

Teaching modes and teaching hours:
lectures – 15 hrs

Language/s of instruction: English

Number of ECTS credits (according to the study programme):

* – leave the appropriate option

1. Course objectives:

To extent students knowledge in chemistry of d-block elements

2. Relation of the field-related learning outcomes to modes of teaching and methods of verification as well as to assessment of student's learning outcomes:

symbol	assumed learning outcomes a student who completed the course:	teaching modes	verification methods and learning outcomes assessment
Knowledge: a student knows and understands			
K1A_W07	Has established, theory based knowledge in the field of inorganic chemistry	Lecture	Quiz (a test)
Skills: a student can			
Social competences: a student is prepared to			

3. The content of study programme ensuring learning outcomes (according to the study programme):

Extended, practical knowledge in chemistry of selected elements and inorganic compounds including their chemical reactions

4. Description of methods of determination of ECTS credits:

Type of activity	Number of hours / ECTS credits
Number of course hours regardless of a teaching mode	15/1
Student's workload 1*	15/1
Student's workload 2*	
Student's workload n*	
The other**(quiz, consultations)	5
Total hours:	35
Number of ECTS credits allocated to a course	2

Explanation:

* – student's workload - fill in the types of activities, e.g. *preparation for a course, interpretation of results, making a course report, preparation for an exam, studying sources, making a project, presentation and report, doing written assignment, etc.*

** – the other e.g. *extra course hours*

5. Summary indexes:

- number of course hours and ECTS credits at the course with a direct participation of academic teachers or other persons running the course and supervising students:
15/1
- number of course hours and ECTS credits at the course related to the scientific activity conducted at the Silesian

University of Technology in a discipline or in disciplines to which a field of study is assigned - in the case of studies with a general academic profile:

35/2

- number of course hours and ECTS credits at the course developing practical skills- in the case of practical studies: 0/0
- number of course hours conducted by academic teachers employed by the Silesian University of Technology as their primary workplace: 15

6. Persons conducting particular modes of courses (name, surname, academic degree or degree in arts, title of professor, business e-mail address):

Dr. Piotr Dydo, Prof., Piotr.Dydo@polsl.pl

7. Detailed description of teaching modes:

1) lectures:

- detailed programme's content:

Discussion of properties of d-block elements and their compounds

- teaching methods, including distance learning:

Asynchronous remote lectures using distant learning platform

- form and criteria for semester completion, including retake tests, as well as conditions for admission to the examination:

quiz (a test)

- course organisation and rules of participation in the course, with an indication whether a student's attendance is obligatory

3 hours of lecture per week in a 5 week block.

2) description of other teaching modes:

none

8. Description of the method for determining the final grade (rules and criteria for evaluation, as well as the final grade calculation method in the case of a course comprising more than one teaching mode, taking into account all teaching modes and all exam dates and credit tests including retake exams and tests):

The quiz result of at least 60% (3 out of 5)

9. Method and procedure for making up for

- student's absence from the course,

- differences in study programmes for students changing their field of study, changing university or resuming studies at the Silesian University of Technology,

none

10. Prerequisites and additional requirements, taking into account the course sequence:

none

Lecture notes and recordings. Inorganic Chemistry books, for example:

F. Albert Cotton, Geoffrey Wilkinson, Carlos A. Murillo, Manfred Bochmann, Advanced Inorganic Chemistry, 1999, ISBN: 9780471199571

E. Housecroft, A. G. Sharpe, Inorganic Chemistry, 2018, ISBN: 9781292134161

11. Description of teachers' competences (e.g. publications, professional experience, certificates, trainings etc. related to the programme contents implemented as a part of the course):

More than 10 year experience in teaching General and Inorganic Chemistry. Teacher knowledge in the field of Inorganic Chemistry applied practically in his scientific research.

12. Other information:

none