



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Specialist English [S2IChIP1>JAS]

### Course

Field of study

Chemical and Process Engineering

Year/Semester

1/1

Area of study (specialization)

Bioprocesses and Biomaterials Engineering

Profile of study

general academic

Level of study

second-cycle

Course offered in

English

Form of study

full-time

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

60

Projects/seminars

0

### Number of credit points

4,00

### Coordinators

mgr inż. Dorota Żarnowska

dorota.zarnowska@put.poznan.pl

### Lecturers

### Prerequisites

The already acquired language competence compatible with level B2 (CEFR) The ability to use general and field specific vocabulary, and grammatical structures required on the first level of studies The ability to work individually and in a group; the ability to use various sources of information and reference works.

### Course objective

1. Advancing students' language competence towards the level at least B2+ (CEFR). 2. Development of the ability to use academic and field specific language effectively in both receptive and productive language skills. 3. Improving the ability to understand field specific texts (familiarizing students with basic translation techniques). 4. Improving the ability to function effectively on an international market and on a daily basis.

### Course-related learning outcomes

Knowledge:

as a result of the course, the student ought to acquire field specific vocabulary related to the following issues:

1. electrolysis

2. organic chemistry, the unique properties of carbon, alkanes, alkenes

3. hydrocarbon structure and isomerism, chemical reactions of alkanes and alkenes
  4. energy changes in chemical reactions,
  5. rates of reaction
  6. catalysts
  7. biopharmaceuticals
- and also define and explain notions, phenomena and processes connected with them.
- k\_w03, k\_w06, p7s\_wg

#### Skills:

as a result of the course, the student is able to:

- give a talk on field specific or popular science topic (in english)
  - discuss general and field specific issues using an appropriate linguistic and grammatical repertoire,
  - formulate a text in english where he/she explains/describes a selected field specific topic, understand and analyze international, field specific literature
  - give a presentation of his/her engineering thesis
- k\_u01, k\_u03, k\_u06, p\_7suk

#### Social competences:

as a result of the course, the student is able to communicate effectively in a field specific/professional area, and to give a successful presentation in english.

he/she is able to recognize and understand cultural differences in a professional and private conversation, and in a different cultural environment.

k\_k01, k\_k03, k\_k06, p\_7skk

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

- Formative assessment: tests during academic year (written and oral), presentations
  1. Oral answer related to the material covered in each of the studies sections/chapters
  2. Giving a presentation - the grade will refer to the ESP content, appropriate language tools (ESP language, grammar..) as well as body language.
  3. Written short tests/ tests/essays after finishing each section/chapter (the grade will be given according to the following scale: not satisfactory 0-59%, satisfactory 60-65%, satisfactory plus 67-75%, good 76-85%, good plus 86-93%, very good 94-100%)
  4. Short oral quizzes - questions during classes referring to the material (each question will be graded up to 5 points)
  5. All homework - done in time.
- Summative assessment: credit - the final grade will be calculated as the mean of all the grades from the semester. In case of on-line mode of studies the assessment will be done in the same way, except for oral tests being carried out using an on-line platform decided on by the authorities of PUT Centre of Languages and Communication.

### Programme content

1. Specialist topics connected with Electrochemistry
2. Specialist topics connected with Organic Chemistry
3. Specialist topics connected with the rate and energy of chemical reactions
4. Specialist topics connected with Biopharmaceuticals
5. Team project - academic presentation

### Course topics

1. Electrolysis
2. Organic chemistry, the unique properties of carbon, alkanes, alkenes
3. hydrocarbon structure and isomerism, chemical reactions of alkanes and alkenes
4. Energy changes in chemical reactions,
5. Rates of reaction
6. Catalysts
7. biopharmaceuticals

## 8. Team project - academic presentation

### Teaching methods

work with texts, discussion, team work, translation, films, individual written and oral deliverance, individual meetings with students, homework analysis, Moodle platform exercises...

### Bibliography

#### Basic

Richard Harwood and Ian Lodge, Cambridge IGCSE Chemistry, Coursebook, Fourth edition, 2014, Cambridge University Press , (IGCS)

Urszula Kamińska, English for Biotechnology, 2016, Publishing House, Gdańsk University of Technology Additional

Richard Harwood and Ian Lodge, Cambridge IGCSE Chemistry, Workbook, Fourth edition, 2014, Cambridge University Press , (IGCS -W)

Gallagher, Rose Marie and Ingram, Paul. 2011. Complete Chemistry. Oxford: Oxford University Press

### Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	60	2,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	40	1,50