# COURSE DESCRIPTION CARD - SYLLABUS

Course name
Diploma seminar [S2TCh2E-KiN>SD]

## Course

Field of study
Chemical Technology

Year/Semester
2/3

Area of study (specialization)
Composites and Nanomaterials

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 (e.g. online)
0

Tutorials
0

Projects/seminars
30

## Number of credit points

2,00

## Coordinators

dr hab. inż. Katarzyna Materna prof. PP
katarzyna.materna@put.poznan.pl

## Lecturers

## Prerequisites

Student has a systematic, theoretically based knowledge of key issues in chemical technology. Student is able to obtain information from literature, databases and other sources connected with chemical sciences, is able to interpret them, draw conclusions and formulate his own opinions. Student is able to apply the acquired knowledge in practice, both during his professional work and during further education. The student understands the need for further training and raising their professional and personal competences.

## Course objective

Obtaining knowledge about the basics of research, development and reporting of research results, especially in the form of thesis and oral presentation. The ability to conduct scientific discussion.

## Course-related learning outcomes

Knowledge:
1. Student has a broad and in-depth knowledge of chemical technology and other related areas of science, allowing to formulate and solve complex tasks related to organic chemical technology. [K_W2]
2. Student has a well-established knowledge of occupational health and safety. [K_W10]
3. Student has a well-established and extended knowledge of the selected specialty. [K_W11]

4.Student has knowledge of selected issues of contemporary chemical knowledge and aspects of copyright and industrial property. [K_W14]

Skills:
1. has the ability to obtain and critically evaluate information from literature, databases and other sources and formulate opinions and reports on this basis. [K_U1]
2. Student is able to speak English in a professional capacity. [K_U3]
3. Student is able to determine the directions of further education and to implement self-education. [K_U5]
4. Student is able to properly formulate and verify hypotheses related to engineering problems in chemical technology. [K_U14]
5. Student has the ability to assess the technological suitability of raw materials and to select the technological process in relation to product quality requirements. [K_U16]
6. Student is able to critically assess the practical utility of using new developments in chemical technology. [K_U17]
7. Student has the ability to use the knowledge acquired in the specialty in professional activity. [K_U23]

Social competences:
1. Student is aware of the need for lifelong learning and professional development. [K_K1]
2. Student is well aware of the limitations of science and technology related to chemical technology, including environmental protection. [K_K2]
3. Student professionally recognizes problems and makes the right choices related to the profession, in accordance with the principles of professional ethics. [K_K3]
4. Student observes all rules of teamwork; is aware of the responsibility for joint ventures and achievements in professional work. [K_K4]
5. Student represents a high moral level in relation to social and professional problems. [K_K5]
6. Student is able to think and act in a creative way. [K_K6]

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The current evaluation of the speeches (the way of presentation, graphic design, the substantive value of the presented results, the ability to respond to the questions asked).

## Programme content

Structure of experimental scientific works: literature review, formulation of the research objective, experimental part (description of apparatus, reagents, materials, research methods), presentation and discussion of results and conclusions. Discussion of the problem of plagiarism and scientific fraud.
Structure of oral scientific presentations: short introduction, research purpose, synthetic discussion of results and conclusions.
Scientific discussion: ability to formulate questions, answers to questions asked.
Review of the thesis on the master's thesis at different levels of advancement.

## Course topics

none

## Teaching methods

Seminars.

## Bibliography

Basic:
Recommended by the thesis supervisor.

Additional:
Recommended by the thesis supervisor.

## Breakdown of average student's workload

| | Hours | ECTS |
|---|---|---|
| Total workload | 50 | 2,00 |
| Classes requiring direct contact with the teacher | 30 | 1,00 |
| Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation) | 20 | 1,00 |