COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma seminar

Course

Field of study

Circular System Technologies

Year/Semester

4/7

Area of study (specialization)

-

Profile of study

general academic

Level of study

First-cycle studies

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

Number of hours

Lecture

15

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

0

Number of credit points

1

Lecturers

Responsible for the course/lecturer:

dr hab. inż. Magdalena Regel-Rosocka, prof. PP

magdalena.regel-rosocka@put.poznan.pl

Wydział Technologii Chemicznej

ul. Berdychowo 4, 60-965 Poznań

tel. 61 665 37 71

Responsible for the course/lecturer:

Prerequisites

Structured knowledge covering the core curriculum of the first-cycle studies in the field of closed-loop technologies.

The ability to self-educate, use source information in Polish and a foreign language in accordance with the principles of ethics, read comprehension, conduct analysis, synthesis, summary, critical assessment and correct inference.

Language skills in the field of closed-loop technologies, in accordance with the requirements specified for level B2 of the European System for the Description of Languages.

Course objective

Acquiring the ability to correctly edit an engineering diploma thesis, select scientific literature, develop and present the results of experimental work, conduct a scientific discussion. Gaining knowledge of the basic requirements and standards for the preparation of the engineering thesis.

Course-related learning outcomes

Knowledge

1. Student has knowledge of mathematics, physics and chemistry as well as systematized, theoretically founded knowledge of inorganic, organic, physical and analytical chemistry necessary to describe the concepts, concepts and principles of closed-loop technologies and to characterize the connections and relationships between its components in order to use them to develop results experiments and presenting them in the engineering diploma thesis [K_W03, K_W04].

2. Student has knowledge of the development of ideas, goals, principles of functioning and the organizational structure of circular economy; knows the economic, economic and legal and administrative aspects of its functioning together with their interrelationships and is able to use this knowledge to develop, interpret and present the results of experiments in an engineering diploma thesis [K_W05].

3. Student has elementary knowledge of intellectual property protection and patent law [K_W27].

Skills

1. Student can obtain information from literature, databases and other sources related to closed-loop technologies, also in a foreign language, integrate them, interpret them, and draw conclusions and formulate opinions [K_U01].

2. Student uses computer programs supporting the implementation of tasks typical for closed-loop technologies [K_U02].

3. Student plans, selects equipment and scientific apparatus, carries out research, analyzes the results and formulates conclusions on this basis [K_U03].

4. Student correctly uses nomenclature and terminology in the discussion about the field of circular economy, chemistry, technology and chemical engineering, environmental protection and related disciplines, also in a foreign language [K_U05].

5. Based on the acquired knowledge, student can develop an independent or team project/report on the work performed and make its multimedia presentation [K_U15].

Social competences

1. In every situation, student behaves professionally, takes responsibility for decisions made in connection with his professional duties, acts in accordance with moral principles and the principles of professional ethics [K_K01].

2. Student independently determines and implements the action plan entrusted to her/him, defining priorities for implementation of the plan, and critically assesses the level of advancement in the implementation of the entrusted task [K_K03].

3. Objectively assesses the level of her/his knowledge and skills, understands the importance of improving professional and personal competences adequately to the changing social conditions and the progress of science [K_K05].

4. Student participates in discussions and is able to conduct discussions, is open to different opinions and ready to assertively express feelings and critical remarks [K_K08].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Two presentations concerning: a) analysis of the literature on the topic of engineering thesis, b) results of experiments obtained during the implementation of the engineering thesis. Assessment criteria: form and method of presentation, quality of the presented content, participation in the discussion on the presented content, active participation in the discussion on the presentation of other engineering works.

Programme content

Thesis layout - the most common formal and substantive errors. The way of using source materials and their presentation at work, creating a list of references. The use of the active signature, link, footnote functions in Word to improve work with large documents. The rules of the anti-plagiarism system and limitations resulting from the protection of intellectual property. Discussion of the method of transferring the acquired knowledge and correct preparation of the presentation of the results (errors most often made during the presentation).

Presentation by students on the analysis of literature and results related to the topic of the engineering thesis. Assessment of knowledge transfer and presentation preparation. Joint discussion after each presentation in order to improve the quality of the presentation and develop the ability to use nomenclature and terminology in the field of engineering work, as well as the ability to accept different opinions, express feelings assertively and criticize.

Information on the preparation of the final version of the thesis as well as documents and procedures related to the submission of the thesis. Information on the course of defense of engineering thesis.

Teaching methods

Seminar - multimedia presentations, group discussion.

Bibliography

Basic

Indicated by the engineering thesis supervisor.

Additional

Indicated by the engineering thesis supervisor.

Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,0
Classes requiring direct contact with the teacher	16	0,5
Student's own work: literature studies, preparation for seminar, preparation of presentations. [1]	9	0,5

[1] delete or add other activities as appropriate