



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma Seminar - heating [N1IŚrod1>SDZwC]

Course

Field of study

Environmental Engineering

Year/Semester

5/9

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

polish

Form of study

part-time

Requirements

elective

Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

20

Projects/seminars

0

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

1. Knowledge: Expanded and deepened general and specialization knowledge needed to formulate a technical problem as well as how to solve it. Knowledge of the requirements posed the preparation and implementation of the thesis. Knowledge of formal accession to the diploma exam. 2. Skills :The ability to formulate a technical problem concerning the thesis and methods of solution of the problem. Ability to defend their thesis presentations. Ability to critically assess the problem and the methods adopted and has the ability to discuss and multimedia use. 3. Social competencies: The student understands the need for lifelong learning; is able to inspire and organize the learning of others. The student is aware of the importance and understand the non-technical aspects and effects of engineering activities, including its impact on the environment and the associated responsibility for decisions.

Course objective

-The aim of the diploma seminar is a follow up to the studies gained knowledge and skills of public presentation developed theme as well as provide students with the principles of accession to the diploma exam, preparing a thesis and defend it.

Course-related learning outcomes

Knowledge:

1. A graduate student has detailed knowledge related to selected issues of the studied field of study
2. A graduate student has a basic knowledge of the development trends concerning fields of science and scientific disciplines relevant to the studied field of study
3. A graduate student has a basic knowledge necessary to understand the social, economic, legal and other non-technical conditions of engineering activities

Skills:

1. A graduate student is able to use information technology, Internet resources and other sources to search for information, communication and acquisition software supporting the work of the designer and managing construction works
2. A graduate student is able to use information and communication technologies relevant to the tasks typical engineering activities
3. A graduate student is able to plan and carry out experiments, including measurements and computer simulations, interpret the results and draw conclusions

Social competences:

1. A graduate student alone complements and extends the knowledge of modern techniques, processes and
2. A graduate student is able to formulate opinions on issues related to the field of study of studies
3. A graduate student draws conclusions and describes the results of their own communicative multimedia presentations

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Evaluation of the prepared (5-20 pages) study containing synthetic information about the purpose of the thesis, research methods used, results and conclusions obtained.

Evaluation of two prepared presentations. The first presenting the concept of the solution, the second showing the most interesting conclusions.

The assessment takes into account the activity of the diploma during seminar classes.

Programme content

To acquaint the graduate students with the principles of formal accession to the diploma exam (terms, conditions). The statutory requirements relating to the preparation of the thesis, forms, scope of work and time frames. Presentation by graduate students (in the form of two presentations), the subject of his thesis and possible discussion. Presentation by graduate students of interesting publications in the press and scientific-technical or non-related topic of the diploma, along with a possible discussion.

Teaching methods

Discussion, multimedia presentation.

Bibliography

Basic:

1. Dembecka W., *Metodyka studiowania w uczelni technicznej*, Wyd. Pol. Poznańskiej, Poznań 1994.
2. Szkutnik Z., *Metodyka pisania pracy dyplomowej*. Skrypt dla studentów, Poznań 2005.
3. Kozłowski R., *Praktyczny sposób pisania prac dyplomowych z wykorzystaniem programu komputerowego i Internetu*, Warszawa 2009.
4. Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 19 grudnia 2008 r. w sprawie rodzajów tytułów zawodowych nadawanych absolwentom studiów i wzorów dyplomów oraz świadectw wydawanych przez uczelnie. (Dz.U. 2009 nr 11 poz. 61).
5. Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 14 września 2011 r. w sprawie dokumentacji przebiegu studiów. (Dz.U. 2011 nr 201 poz. 1188).
6. Regulamin studiów stacjonarnych i niestacjonarnych pierwszego i drugiego stopnia oraz jednolitych magisterskich uchwalony przez Senat Akademicki Politechniki Poznańskiej Uchwałą Nr 89 z dnia 28 kwietnia 2010 r. na podstawie ustawy z dnia 27 lipca 2005 r. Prawo o szkolnictwie wyższym (Dz. U. Nr 164, poz. 1365 z późn. zm.).
7. Ustawa z dnia 27 lipca 2005 r. Prawo o szkolnictwie wyższym. (Dz.U. 2005 nr 164 poz. 1365, tekst

jednolity Dz.U. 2012 poz. 572).

8. Ustawa z dnia 4 lutego 1994 r. o prawie autorskim i prawach pokrewnych. (Dz.U. 1994 nr 24 poz. 83).

Additional:

1. Rajczyk J., Rajczyk M., Respondek Z., Wytyczne do przygotowania prac dyplomowych magisterskich i inżynierskich na Wydziale Budownictwa Politechniki Częstochowskiej, Częstochowa 2004

2. Bobrowski D., Wybrane metody wnioskowania statystycznego, Wyd. Pol. Poznańskiej, Poznań 1988.

3. Opoka E., Uwagi o pisaniu i redagowaniu prac dyplomowych na studiach technicznych., Wydawnictwo Politechniki Śląskiej, Gliwice, 2003.

Breakdown of average student's workload

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