

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

COURSE DESCRIPTION CARD - SYLLABUS

Course name

DOCTORAL SEMINAR

Course

Proposed by Discipline Year/Semester

- II/4

Type of studies Course offered in

Doctoral School English

Form of study Requirements full-time compulsory

Number of hours

Lecture Tutorials Projects/seminars

10

Number of credit points

2

Lecturers

Responsible for the course/lecturer: Responsible for the course/lecturer:

Coordinator within the discipline or a delegated lecturer from the respective Faculty

Prerequisites

Knowledge: PhD student has the knowledge resulting from the scope of completed university studies, necessary to implement the doctorate in the chosen discipline.

Skills: PhD student is able to organize his own workshop using modern research methods; is able to formulate and verify research hypotheses, plan and conduct research and scientific experiments as well as analyze, interpret, critically evaluate, develop and present research results.

Social competences: PhD student is prepared to take social responsibility for studying at the 3rd degree of education; understands the need to deepen, update and popularize knowledge especially regarding the achievements of science and technology. Has the ability to work in a team, is open to cooperation with other people.



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Course objective

Getting to know the general principles of preparing doctoral documentation in accordance with the PhD School requirements related to mid-term assessment. Overview of the basic requirements for the preparation of a written report in which the doctoral student presents the implementation of the individual research plan; broadening the knowledge of PhD students concerning the ways to properly prepare and give oral presentations of scientific achievements related to realization of doctoral dissertation.

Course-related learning outcomes

Knowledge

A PhD student who graduated from doctoral school knows and understands:

- 1. to the extent that enables revision of existing paradigms global achievements, covering theoretical basis as well as general and selected specific issues, that are specific to scientific disciplines studied at the doctoral school, [P8S_WG/SzD_W01]
- 2. key developmental trends of science disciplines in which education takes place at the doctoral school, [P8S_WG/SzD_W02]
- 3. principles of promoting scientific activity results, also in an open access mode, [P8S WG/SzD W04]
- 4. basic conditions of knowledge transfer to the economic and social sphere as well as commercialization of the results of scientific activities and know-how related to these results. [P8S_WK/SzD_W07]

Skills

A PhD student who graduated from doctoral school can:

- 1. use the knowledge from different branches of science to creatively identify, formulate and to innovatively solve complex problems or to execute research tasks in particular:
 - define the aim and subject of scientific research, form a research hypothesis,
 - develop research methods, techniques and tools and use them creatively,
 - draw conclusions on the basis of research results, [P8S UW/SzD U01]
- 2. critically analyze and asses scientific research results, work of experts and other creative activities together with their contribution into knowledge development, [P8S_UW/SzD_U02]
- 3. take part in scientific discourse. [P8S_UK/SzD_U07]

Social competences

A PhD student who graduated from the doctoral school is ready to:

- 1. critically assess the achievements within a given scientific discipline, [P8S KK/SzD K01]
- 2. critically evaluate their own contribution to the development of a given scientific discipline, [P8S KK/SzD K02]
- 3. maintain and develop the ethos of research and creative communities, including:
 - conducting independent scientific activity,
 - respecting the principle of public ownership of the results of scientific activities, including the principles of intellectual property protection. [P8S_KR/SzD_K07]



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Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

| PQF code | Methods for verification of learning outcomes | Assessment criteria | |
|-----------|---|---------------------|--|
| W01, W02, | Assessment of oral presentation and assessment of | 3.0 (50.1 - 70.0%) | |
| W04, W07 | student's answers to questions related to both the | 4.0 (70.1 - 90.0%) | |
| | presentation and their knowledge of relevant discipline | 5.0 (from 90.1%) | |
| U01, U02, | Lecturer responsible for the seminar assesses the | 3.0 (50.1 - 70.0%) | |
| U07 | presentation prepared by doctroral students with the use | 4.0 (70.1 - 90.0%) | |
| | of computer software and their activity in subsequent | 5.0 (from 90.1%) | |
| | discussion | | |
| K01, K02, | Assessment of doctoral student's activity in the discussion | 3.0 (50.1 - 70.0%) | |
| K07 | during seminar classes and their involvement in the | 4.0 (70.1 - 90.0%) | |
| | presentation | 5.0 (from 90.1%) | |

Programme content

Discussing the key principles of organizing doctoral documentation according to the requirements of the PhD School; providing essential guidelines for preparing a doctoral dissertation, and expanding PhD students' knowledge on effectively preparing and delivering oral presentations.

Course topics

- 1. Ways to prepare PhD students for mid-term assessment (a written report in which the doctoral student presents the implementation of the individual research plan, doctoral student's presentation of scientific achievements related to realization of doctoral dissertation).
- 2. Structure of documents for PhD student's mid-term assessment (a written report, a presentation of achievements).
- 3. Presentation and discussion (individual reports, achievements and progress in the implementation of the doctoral dissertation).
- 4. Discussion on CRITICAL THINKING (searching for an answer to the question: IS THIS TRUE) as one of the transversal competences.

Teaching methods

Seminar, consultations on implemented projects, workshops - discussions on the presented diploma projects.

Bibliography



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Basic

- 1. Chris A. Mack, The lecturer responsible for the seminar assesses the presentation prepared by the doctoral students and their activity in the discussion. How to Write a Good Scientific Paper, SPIE PRESS Bellingham, Washington USA, 2018.
- 2. Marino J, Stefan MI, Blackford S (2014) Ten Simple Rules for Finishing Your PhD. PLoS Comput Biol 10(12): e1003954. https://doi.org/10.1371/journal.pcbi.1003954

Additional

1. Turabian KL. A Manual for Writers of Research Papers, Theses, and Dissertation, 8th edition, Chicago (Illinois): The University of Chicago Press, 2013.

Breakdown of average student's workload

| | Hours | ECTS |
|---|-------|------|
| Total workload | 50 | 2,0 |
| Classes requiring direct contact with the teacher | 10 | 0,5 |
| Doctoral student's own work (literature studies, preparation for tutorials, project preparation, consultations with the teacher) ¹ | 40 | 1,5 |



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 $^{^{\}mbox{\scriptsize 1}}$ delete or add other activities as appropriate