



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Pre-diploma Seminar [S2Inf1-SRC>SEMPD]

### Course

Field of study

Computing

Year/Semester

1/2

Area of study (specialization)

Distributed and cloud systems

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

30

### Number of credit points

2,00

### Coordinators

dr hab. inż. Anna Kobusińska prof. PP  
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### Lecturers

### Prerequisites

Student should know English at least at the B2 level, be able to prepare presentation slides using PowerPoint or similar tool, and he/she should also know rudiments of the LaTeX system.

### Course objective

Presentation of general rules concerning preparation of master's thesis and its defense. Stimulation of systematic work on the thesis. Allowing the students to present their ideas in the context of systematic literature review, including outline of structured abstract of their prospective master's thesis. Improving students' presentation skills, including usage of multimedia presentation tools. Developing students' capabilities of precise expression of their thoughts, drawing correct conclusions, and participation in research-related discussions.

### Course-related learning outcomes

Knowledge:

the student has an in-depth knowledge of the issues concerning his/her future thesis. (k2st\_w4)  
the student knows the structure of a "structured abstract" and the protocol of a systematic literature review. (k2st\_w6)

the student has basic knowledge of intellectual property and the phenomenon of plagiarism. (k2st\_w7)

#### Skills:

the student is able to conduct a literature study based on a systematic literature review. (k2st\_u1)

the student is able to select appropriate bibliographical databases and formulate queries related to the research questions. (k2s\_u2)

the student is able to discuss in information technology topics (k2s\_u12).

the student is able to prepare and deliver a presentation. (k2s\_u13)

the student is able to act as a reviewer and point out possible weaknesses in the slr protocol (k2s\_u15)

the student is able to independently acquire the knowledge needed to write a thesis. (k2st\_u16)

#### Social competences:

the student realizes the rapid growth of knowledge and how quickly his achievements can become obsolete. (k2st\_k1)

the student realizes the importance - from a practical point of view - of using the latest knowledge. (k2st\_k2)

the student realizes how important it is - also for himself - to share knowledge with others. (k2st\_k3)

the student realizes the consequences of plagiarism. (k2st\_k4)

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment will comprise:

- \* multimedia presentation of protocol of systematic literature review (including quality of slides and the way of presenting them),
- \* participation in discussion (quality of remarks and the way of presenting them),
- \* knowledge of the basic literature concerning the seminar (test).

Summative assessment will be based on the following items:

- \* evaluation of the report of systematic literature review (including bibliographic style),
- \* participation in discussions and quality of remarks,
- \* assessment of project statement of master's thesis based on structured abstract.

Each of the above items will be graded from 0 up to 10 points and the final grade will be based on weighted average of those three grades.

### Programme content

1. Systematic Literature Review
2. Multimedia presentations - Basic principles
3. Good practices in scientific discussions and reviews
4. Formulating a research topic based on structured abstract
5. References, citations, and bibliographic styles
6. Master's thesis structure and the diploma procedure

### Course topics

The topics of the course include the following issues:

Diploma rules. Basic requirements for diploma theses. Ways to use source materials and an overview of the main sources of scientific publications available online. Principles of conducting a literature review. Rules for creating abstracts and summaries. Methodology of conducting research, especially in the field of computer science. Planning and performing research experiments. Basic rules for writing scientific articles. Principles of preparing multimedia presentations. Basic rules for presenting a scientific report.

### Teaching methods

During first meetings the instructor will present the course content in a lecture form (multimedia presentation). The remaining meetings will be devoted to student presentations (also multimedia ones). After each student presentation there will be a discussion focused on its strengths and weaknesses. The seminar will be supported by the eKursy platform (Moodle) where the students can find auxiliary materials and through which they will submit their documents (e.g. slides).

## Bibliography

### Basic

1. American Psychological Association. (2022, March). Style and grammar guidelines. APA Style. Pobrane z <https://apastyle.apa.org/style-grammar-guidelines>
2. Brereton, P., Kitchenham, B. A., Budgen, D., Turner, M., & Khalil, M. (2007). Lessons from applying the systematic literature review process within the software engineering domain. *Journal of systems and software*, 80(4), 571-583. Pobrane z <https://doi.org/10.1016/j.jss.2006.07.009>
3. Budgen, D., Brereton, P., Drummond, S., & Williams, N. (2018). Reporting systematic reviews: Some lessons from a tertiary study. *Information and Software Technology*, 95, 62-74. <https://doi.org/10.1016/j.infsof.2017.10.017>
4. Carrera-Rivera, A., Ochoa-Agurto, W., Larrinaga, F., & Lasa, G. (2022). How-to conduct a systematic literature review: A quick guide for computer science research. *MethodsX*, 101895. Pobrane z <https://www.sciencedirect.com/science/article/pii/S2215016122002746>
5. Overleaf. (2023). Documentation. Pobrane z <https://www.overleaf.com/learn>
6. Overleaf. (2023). Bibliography management with bibtex. Pobrane z [https://www.overleaf.com/learn/latex/Bibliography\\_management\\_with\\_bibtex](https://www.overleaf.com/learn/latex/Bibliography_management_with_bibtex)
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12. Wikipedia. (2023, June 25). PICO process. Pobrane z [https://en.wikipedia.org/wiki/PICO\\_process](https://en.wikipedia.org/wiki/PICO_process)
13. Wohlin, C. (2014, May). Guidelines for snowballing in systematic literature studies and a replication in software engineering. In *Proceedings of the 18th international conference on evaluation and assessment in software engineering* (pp. 1-10). Pobrane z <http://dx.doi.org/10.1145/2601248.2601268>

### Additional

14. Bui, Y. N. (2013). *How to write a master's thesis*. Sage Publications. Pobrane z [https://books.google.pl/books?hl=en&lr=&id=\\_bQgAQAQAQBAJ&oi=fnd&pg=PP1&dq=master+thesis&ots=Oi76Mj0vgY&sig=2ghUMNTO1G8ntGfWPsEA4fM4qho&redir\\_esc=y#v=onepage&q=master%2](https://books.google.pl/books?hl=en&lr=&id=_bQgAQAQAQBAJ&oi=fnd&pg=PP1&dq=master+thesis&ots=Oi76Mj0vgY&sig=2ghUMNTO1G8ntGfWPsEA4fM4qho&redir_esc=y#v=onepage&q=master%2)
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22. Wohlin, C., & Rainer, A. (2022). Is it a case study?—A critical analysis and guidance. *Journal of*

### 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