



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Thesis writing methodology [N2IŚrod1>MPPU]

### Course

Field of study

Environmental Engineering

Year/Semester

2/3

Area of study (specialization)

Water Supply, Water and Soil Protection

Profile of study

general academic

Level of study

second-cycle

Course offered in

polish

Form of study

part-time

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

10

### Number of credit points

1,00

### Coordinators

dr hab. inż. Katarzyna Ratajczak

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### Lecturers

### Prerequisites

The title of the thesis with the scope of work formulated by the thesis supervisor. Basic skills obtained during the implementation of the engineering diploma - the ability to formulate the aim of the work, and write the engineering diploma thesis. Basic principles of using the library collection. The skills to search databases and the Internet. Awareness of the need to develop the ability to obtain the necessary materials in the learning process.

### Course objective

Drawing attention to the structures of scientific texts published in Polish and foreign scientific and technical journals, and to the practical use of the described results. Searching for information in scientific and technical publications (practice). Conducting a literature review on the subject of the master's thesis, which should be the basis for the formulation of the research problem, thesis hypotheses and determination of methods for solving the problem (in the next semester during the completion of the thesis). Need to educate students to train them in the ability to search for information necessary for writing their theses and to use the information resources of their own library and those of other libraries.

### Course-related learning outcomes

### Knowledge:

The student knows what is the state of knowledge in a given topic and how the purpose of scientific research is defined.

The student knows for what purpose a literature review in a given topic and a discussion of own results and those published in the literature are performed.

The student has knowledge of various styles of bibliographic description and available tools to prepare his own list of literature.

Student knows the rules of using printed and electronic library resources.

Student knows the rules of using printed and electronic library resources available in reading rooms and outside.

Student is able to choose different search strategies in each type of resources.

Student knows the possibilities of borrowing library materials from other national and foreign libraries.

Student demonstrates the knowledge of preparing bibliography.

The student is able to select the accurate literature for the chosen topic.

### Skills:

The student is able to obtain information from a selected scientific work by analyzing various fragments of a scientific work.

The student is able to define the research goal based on the literature review and is able to identify the research gap in an exemplary scientific work.

The student is able to prepare a note with information obtained from a scientific work on a given topic.

The student is able to search for scientific articles, including English-language ones, on a given topic, including the topic of the thesis, using various configurations of keywords.

The student is able to perform a description of the state of knowledge regarding the topic of the master's thesis in an appropriate and uniform bibliographic style and prepare it in the form of a written study and plan further activities aimed at the implementation of the diploma thesis.

Student is able to search for the necessary information materials in the printed and electronic library resources using modern searching tools.

Student is able to present and use materials in defined research topics.

### Social competences:

The student is aware of the need to consult the formulated texts with the thesis supervisor.

Student is aware of the source and existence of national and world bibliographic databases and full text services.

Student is aware of the use of information search skills in his professional career and personal development.

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Presentation of the conducted literature review in the form of a report (title page, two chapters, reference list), in the selected style of citation with the supervisor's opinion. The supervisor confirms that the review in the given topic has been carried out, to what extent the points from the thematic sheet regarding the literature review have been completed - indicates whether the literature review is complete or needs to be supplemented (indicate whether the description should be extended, add some issues, how to evaluate the bibliography in the room 1-5 (according to the review form) No promoter opinion - report the reason

Obtaining the supervisor's opinion in the literature review is a good rating. The higher grade is awarded to students who will submit their tasks on an ongoing basis and on time, and a lower grade if they do not complete their tasks on time. Detailed scoring of each element taken into account in the final evaluation is described in the e-course of the course.

## Programme content

1. General information on access to the library collection - reminder.
2. Detailed information on the availability and terms of use of electronic resources.
3. Methods of creating simple and advanced search strategies based on printed and electronic resources for field of study.
4. Tools supporting access and search for information in licensed and open access resources.
5. Bibliography management based on available software (e.g. EndNote Web)

6. Literature review as an introduction to the thesis - the structure of the thesis, use of the literature review to formulate the aim of the thesis
7. How to effectively read scientific and technical articles - Structure of scientific and technical articles, research conclusions, research problem, research goal, hypotheses, problem solving methods
8. How to cite in practice - Use of valuable information in a literature review, style of citation, style of bibliography.
9. Should only scientific and technical articles be used when carrying out the work? - manuals, legal regulations, websites
10. Results and discussion - how to use scientific and technical articles - is it worth discussing the results?

### Teaching methods

Discussion, multimedia presentation, work with source materials, work with tools for creating a bibliography, searching for sources, individual work, discussion.

### Bibliography

Basic:

1. Szkutnik Z., *Metodyka pisania pracy dyplomowej*. Skrypt dla studentów, Poznań 2005.
2. Kozłowski R., *Praktyczny sposób pisania prac dyplomowych z wykorzystaniem programu komputerowego i Internetu*, Warszawa 2009.
3. Printed and electronic resources available through the website of the Library of the Poznań University of Technology, accessed at <http://www.library.put.poznan.pl>.
4. Access and information about usage of the e-sources: <http://library.put.poznan.pl/pl/2.html>
5. Training materials: [http://library.put.poznan.pl/pl/6\\_06.html](http://library.put.poznan.pl/pl/6_06.html)
6. Materials on Open Access: <http://library.put.poznan.pl/pl/11>
7. Antczak, M., Nowacka, A., *Przypisy, powołania, bibliografia załącznikowa: jak tworzyć i stosować - podręcznik*

Additional:

Additional literature will be included in the e-course.

### Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	10	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	15	0,50