POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

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

COURSE DESCRIPTION CARD - SYLLABUS

Course name

INFORMATION SKILLS IN SCIENCE AND TECHNOLOGY

Course

Proposed by Discipline	Year/Semester
-	I/1
Type of studies	Course offered in
Doctoral School	English
Form of study	Requirements
full-time	elective

Number of hours

Lecture	Tutorials	Projects/seminars
	2	

Number of credit points

1

Lecturers

Responsible for the course/lecturer:
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Library
Poznan University of Technology
ul. Piotrowo 2, 60-965 Poznan, Poland

Prerequisites

Knowledge: The PhD student knows the basic principles of using library collections. The PhD student has basic knowledge about keywords, search phrases and scientific terms, in English, related to research topics, necessary to conduct a practical search. The PhD student is aware of the need to develop information skills needed to acquire the materials in the education process.

Skills: The PhD student is able to search for the necessary information materials in the printed and electronic library resources using modern searching tools and is able to present and use materials in defined research topics.

Social competences: Awareness of the need to develop skills of searching necessary information for writing thesis. The PhD student is aware of the source and existence of national and world bibliographic databases and full text services. The PhD student is aware of the use of information search skills in his professional career and personal development.

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Course objective

Developing PhD students' information competencies in the field of multi-faceted professional and specialist literature search skills in the given scientific field. The need to educate students in the use of information science and communication technologies, search tools supporting access, and search in information resources. An advanced course covers advanced searching, publishing issues (including Open Access), citation, and the use of materials.

Course-related learning outcomes

Knowledge

The PhD student knows the principles of using printed resources of scientific libraries and their sharing. The student knows the legal aspects related to the use and remote access to electronic resources (specialized databases, repositories, scientific services, and others). The PhD student has knowledge of the allowed and prohibited use of licensed resources. [P8S_WK/SzD_W06]

The PhD student has knowledge of professional sources of information and tools useful for conducting literature analysis (licensed and Open Access). [P8S_WG/SzD_W04]

The PhD student knows the rules for creating advanced search queries (informational queries) using professional keywords, search phrases, and logical operators in English.

The PhD student has knowledge in the field of creating multi-faceted information searches in various types of sources (national and global sources of scientific information).

The PhD student is aware of technological, legal issues, and organizational limitations related to the databases used, services, and electronic tools.

The PhD student knows the rules for creating an attachment bibliography using useful tools (reference managers).

The PhD student has knowledge of the availability of professional literature in information resources on the topic of the thesis. [P8S_WG/SzD_W01]

Skills

The PhD student is able to independently search for the necessary information materials in printed and electronic resources.

The PhD student uses modern search tools to facilitate access and search to gather the necessary literature. The PhD student is able to adapt the search strategy to the type of information source.

The PhD student is able to develop an attachment bibliography in the given scientific field using the available bibliographic tools.

The PhD student is able to manage and use the collected literature in their own dissertation and scientific research. [P8S_UW/SzD_U02]

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Social competences

The PhD student is aware of the existence of world bibliographic databases and full-text services including literature in the given scientific discipline and related sciences. The PhD student understands the idea of the social impact of scholarly work and the importance of open publishing. The PhD student can evaluate the choice of publication place in the context of popularizing scientific output. [P8S_KK/SzD_K01]

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, W04, W06	Practical task to verify knowledge (own work): Search for important publications or sources of scientific information in one's scientific field (list of databases or field journals), use appropriate search tools.	Evaluation of the submitted assignment - its completeness and student involvement
U02	Practical task to verify skills (own work): Practical search in a given scientific field using advanced search queries, search results exported from the database with search criteria, justification of selected information sources.	Evaluation of the submitted assignment - its completeness and student involvement
K01	Practical task to verify social competences (own work): Searching for potential journals to publish in one's own scientific field - indicating Impact Factor, journal score, its license, and valid publisher - avoiding predatory publishers	Evaluation of the submitted assignment - its completeness and student involvement

Programme content

1. General information about access to library collections (types of information sources, student services related to studying and obtaining literature).
2. Detailed information on the provision and terms of use of electronic resources.
3. Methods for creating simple and advanced search strategies based on printed and electronic resources.
4. Practical search of scientific and professional literature in various types of resources, using multi-faceted criteria and search capabilities of information sources, including access to full-text resources.
5. Linking tools, supporting access and searching information, content aggregators, and other technological facilities in searching, on the example of selected licensed and free access resources (Open Access).
6. Legal aspects of publishing, sharing, and citing scientific content. Publishing in Open Access.
7. Rules and the possibility of creating a bibliography based on data contained in databases, services, or using available software.

Teaching methods

Tutorials: multimedia presentation including illustrations and examples (search engine workshop). E-learning method.

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Bibliography

Basic

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2. Access and Terms of E-Resources Use. [Online].<https://library.put.poznan.pl/en/2_01_en> (access: 09.03.2023).
3. E-resources. [Online]. <https://library.put.poznan.pl/en/2_en> (access: 02.03.2023).
4. Szczepańska, A., (2007). The basic information retrieval strategies and their use in practice, „Przegląd Biblioteczny", R. 75, z. 2,s. 233-251.[Online]. <https://depot.ceon.pl/handle/123456789/5254>. (Access: 02.03. 2023).
5. Materials on Open Access. [Online]. <https://library.put.poznan.pl/pl/11>. (Access: 02.03.2023).
6. Website Purdue University. Purdue Online Writing Lab. [Online]. <https://owl.purdue.edu/owl/purdue_owl.html>. (Access: 02.03. 2023)

Additional

1. Website Creative Commons. 2023. [Online]. <https://creativecommons.org/> (Access: 02.03.2023).
2. Website UNESCO. UNESCO recommendation on Open Science. {Online} <WWW.UNESCO.ORG > (Access 02.03.2023).
3. Website Wirtualna Biblioteka Nauki. [Online]. <https://wbn.icm.edu.pl/> (Access: 02.03.2023).
4. Reference management software – EndNote. [Online]. <https://access.clarivate.com/login?app=endnote> (Access: 02.03.2023).

Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1.0
Classes requiring direct contact with the teacher	2	0.2
Student's own work (preparation for tutorials, consultations with the teacher) [1]	23	0.8

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[1] delete or add other activities as appropriate