Subject card

Subject name and code	Basics of Designing a Thesis - laboratory classes, PG_00201453		
Field of study	Water Management and Protection of Water Resources		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2028/2029
Education level	Bachelor's studies	Subject group	Obligatory subject group in the field of study Subject group related to practical vocational preparation
Mode of study	full-time studies	Mode of delivery	e-learning
Year of study	3	Language of instruction	Polish
Semester of study	5	ECTS credits	1.0
Learning profile	practical	Assessment form	credit
Conducting unit	Department of Hydrology -> Faculty of Oceanography and Geography -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Joanna Fac-Beneda	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	15.0	0.0	0.0	15

E-learning hours included: 15.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	15	1.0	9.0	25

Subject objectives

- To familiarize students with the methodology of creating simple works in the form of a scientific monograph or project work.
- Developing the ability to plan and conduct simple scientific research with the support of a research supervisor.
- Developing the ability to correctly present the substantive assumptions and results of your research.
- Developing and improving the ability to critically evaluate the presented scientific content.
- Improving the ability to conduct a scientific discussion.
- The classes are aimed at helping you choose a topic and prepare a bachelor's thesis project.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[GWOZWL3-W01] The student knows and understands in advanced basic biological, physical and chemical processes and phenomena, as well as analyzes their mutual relations and course in relation to natural environment and socio-ecological systems.	Knows and understands - to an advanced level - selected factual objects and phenomena and the methods and theories related to them, explaining the complex interrelationships between them, constituting basic general knowledge in the field of water management and knows and understands the practical applications of this knowledge in professional activities related to water management.	[SW2] presentation/project/paper/ report
	[GWOZWL3-U07] The student can use literature and other available sources of information, including information technology, multimedia, Internet, databases, and select and critically evaluate information.	Can apply his/her knowledge - formulate and solve complex non-standard problems. Selects sources and information appropriately, evaluates, critically analyses and synthesises such information, selects and applies appropriate methods and tools, including advanced information and communication technologies. Seeks out and uses literature for the diploma thesis in Polish and English and selects it.	[SU5] implementation of a problem task
	[GWOZWL3-K02] The student has the ability adhere to the principles of intellectual honestyand professional ethics.	Is ready to cultivate and disseminate models of appropriate behaviour in and outside the work environment, and participates in and accepts responsibility for the consequences of these actions.	[SK1] oral statement/conversation/ discussion
	[GWOZWL3-K03] The student has the ability systematic further education and professional development, updating and expand their knowledge and skills, understands the limitations of his own knowledge in the context of civilization progress and recognizes authorities in the professional and scientific environment.	He is ready to perceived content, to recognise the importance of knowledge in solving cognitive and practical problems, and to consult experts when he has difficulties in solving a problem on his own.	[SK1] oral statement/conversation/ discussion
	[GWOZWL3-K04] The student is able to maintain a critical attitude in accepting information from various sources relating to issues in the field of water management.	He is ready to critically evaluate the knowledge he possesses and the content he receives.	[SK1] oral statement/conversation/ discussion
	[GWOZWL3-W12] The student knows and understands basic concepts and principles in the field of protection of industrial property and copyright.	knows and understands the basic concepts and principles of industrial property and copyright protection	[SW1] oral statement/ conversation/discussion
	[GWOZWL3-U17] The student is able to learn and plan their development independently in a targeted manner.	Can plan and organise his/her own work individually and as part of a team and interact with others in teamwork. Can independently plan his/her own lifelong learning. Can organise his/her own work and critically assess the degree of progress.	[SU8] observation of student's independent or team work
	[GWOZWL3-W07] The student has advanced knowledge of data sources and the theoretical foundations of data collection, compilation and evaluation for a dissertation.	knows the sources of data and knows and understands the theoretical basis of data extraction techniques, collects and pre-assesses data for the thesis	[SW2] presentation/project/paper/ report
	[GWOZWL3-U13] The student is able to read with understanding specialized scientific texts in Polish and foreign language.	Can understand specialist texts read in Polish and English.	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU3] text preparation/written work [SU5] implementation of a problem task

<table>
<tr><td>Subject contents</td><td>1. Data sources in water science
2. Methods of collecting literature and source materials.
3. Analysis and interpretation of scientific texts, statistical data and cartographic materials.
4. Selected research methods in water sciences.
5. Bachelor's thesis topics</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></td></tr>
<tr><td>Assessment methods and criteria</td><td>
<table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>oral statement - article review</td><td>51.0%</td><td>45.0%</td></tr>
<tr><td>presentation - draft table</td><td>51.0%</td><td>10.0%</td></tr>
<tr><td>presentation - draft figure/map</td><td>51.0%</td><td>30.0%</td></tr>
<tr><td>presentation - chart design</td><td>51.0%</td><td>15.0%</td></tr>
</table>
</td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td>• Święchowicz J. (ed.), 2016, General studio. A guide to the development of key learning and research competencies during studies, IGiGP UJ, Kraków.
• Weiner J., 1998, Technique of writing and presenting natural science papers. A practical guide, PWN, Warsaw.
• Babbie E., 2007, Social research in practice, PWN, Warszawa.
• Apanowicz J., 2003, Methodology of sciences, Tow. Naukowe Organizacji i Kierownictwa Dom Organizatora, Toruń.
• Jażdżewska I., 2003, Statystyka dla geografów, Wydawnictwo Uniwersytetu Łódzkiego, Łódź.</td></tr>
<tr><td>Supplementary literature</td><td>• Bielec E., Bielec J., 2007, Handbook of Writing Works, EJB Publishing House, Kraków.
• Oliver P., 1999, How to write university papers: a guide for students, Wydawnictwo Literackie, Kraków.
• Plit F., 2007, How to write undergraduate and graduate geography papers, Wyd. Uniw. Warszawskiego, Warszawa.
• Wosik E. (ed.), 2005, Report on the Principles of Respect for Authorship in Dissertations and Doctoral Theses at Academic and Scientific Institutions, Instytut Społeczeństwa Wiedzy / Fundacja Rektorów Polskich, Warszawa.</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td></td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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