

Subject card

Subject name and code	Hydrology - field training, PG_00120140						
Field of study	Geography						
Date of commencement of studies	October 2024	Academic year of realisation of subject			2025/2026		
Education level	undergraduate studies	Subject group			Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	full-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			Polish polish		
Semester of study	4	ECTS credits			3.0		
Learning profile	academic	Assessment form					
Conducting unit	Pracownia Limnologii -> Katedra Hydrologii -> Faculty of Oceanography and Geography						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Wojciech Maślanka				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	24.0	0.0	0.0	0.0	24
	E-learning hours included: 0.0						
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	24		12.0		34.0	70
Subject objectives	<ol style="list-style-type: none"> 1. Learning the causes and geographical conditions of water circulation in nature. 2. Spatial diversity of hydrosphere objects and their characteristics. 3. Learning about human influence on shaping the hydrosphere. 4. Learning the sources of hydrological information. 						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[GEOGRL3-U01] identify and analyze basic natural and socio-economic processes and phenomena and analyze their causes and course	K_U01: Identifies hydrographic objects and is able to analyze those occurring between them their connections (Program content: A.1-2; B1-10)	[SU5] implementation of a problem task
	[GEOGRL3-U06] apply methods and research tools of geographic sciences, including conducting observations and field measurements, and assess their suitability for the tasks in which the application objective of geography can be achieved	K_U06: Is able to select appropriate research methods to carry out planned research project (Program content: A.1-2; B1-10)	[SU6] demonstration of practical skills
	[GEOGRL3-W03] in an advanced degree the processes and phenomena occurring in the natural environment of the Earth, with particular emphasis on the processes and phenomena occurring on the territory of Poland, especially the Coastal and South Baltic Lake Districts	K_W03: Knows and understands hydrological processes taking place in catchments young glacial period (Program content: A.1-2; B1-10)	[SW5] implementation of a problem task
	[GEOGRL3-U07] use geoinformatics techniques and simple statistical tools and methods of spatial analysis to determine relationships between a variety of variables specific to the geographic environment and present the results of the analyses performed	K_U07: Applies statistical methods and GIS tools to analyze data obtained in during the field experiment, data and their graphical presentation (Content program: A.1-2; B1-10)	[SU6] demonstration of practical skills
	[GEOGRL3-K03] work in a group and perform various roles in it, take care of the entrusted equipment and the safety of themselves and others	K_K03: Is ready to carry out team tasks and with due diligence completes assigned tasks according to his position in the group (leader, performer) (Program content: A.1-2; B1-10)	[SK5] implementation of a problem task [SK8] observation of student's independent or team work
	[GEOGRL3-W08] at an advanced level methods and principles development of data on the natural and anthropogenic environment, and methods of their analysis and interpretation	K_W08: Knows hydrographic mapping methods and the basics of interpreting phenomena hydrological processes (Program content: A.1-2; B1-10)	[SW5] implementation of a problem task
	[GEOGRL3-W07] on advanced level methods of acquiring data on the natural and anthropogenic environment, including operation of specialized equipment	K_W07: Knows the content of a hydrographic map and understands the principles of describing the water cycle in catchment area (Program content: A.1-2; B1-10)	[SW3] text preparation/written work
	[GEOGRL3-U04] plan and carry out, independently and in a team, a simple research procedure in the field of geographical sciences under the guidance of a scientific supervisor	K_U04: Is able to plan and carry out (independently or in a group) simple tasks research project (Program content: A.1-2; B1-10)	[SU5] implementation of a problem task

Subject contents	<p>Program content</p> <p>A. Topics of the lecture</p> <p>A.1. Principles of hydrographic mapping.</p> <p>A.2. Rules for conducting lake measurements.</p> <p>B. Problems of exercises</p> <p>B.1. Hydrographic mapping (identification of hydrographic features)</p> <p>B.2. Flow rate measurement using various methods.</p> <p>B.3. Measurement of water discharge efficiency underground.</p> <p>B.4. Water level measurement underground.</p> <p>B.5. Lake stratification lakes.</p> <p>B.6. Lake morphometry.</p> <p>B.7. Measurements of basic physical and chemical characteristics of surface and groundwater.</p> <p>B.8. Hydrotechnical development and water management facilities</p> <p>B.9. Threats and counteracting pollution of the water environment</p> <p>B.10. Hydrographic map of Poland at a scale of 1:50,000</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	completion of final work	51.0%	100.0%

Recommended reading	Basic literature	<p>A. Literature required to finally pass the course (pass the exam):</p> <p>A.1. used during classes</p> <p>Bajkiewicz-Grabowska E., Magnuszewski A., 2009, Guide to exercises in general hydrology, PWN, Warsaw.</p> <p>Gutry-Korycka M., Werner- Więckowska H., 1989, Guide to hydrographic field research, PWN, Warsaw.</p> <p>Instructions for preparing a hydrographic map of Poland, 1964, Doc. Geogr. IG MR. Technical guidelines K-3.4.</p> <p>Hydrographic map on a scale of 1:50,000, 1985, GUGiK, Warsaw.</p> <p>A.2. studied independently by the student</p> <p>Drwal J., Gołębiowski R., Lange W., 1975, Borucinki River Basin as an example of a representative catchment area of the Kashubian Lake District, Zesz. Science. Department BINOZ UG, Geography 3</p>
	Supplementary literature	<p>C. Additional literature</p> <p>Borowiak D. (ed.), 2007, Lakes of the Kashubian Landscape Park, Ser. Bad. Limn. 5, Pub. KLUG, Gdańsk.</p> <p>Lange W. (ed.), 2005, Lakes of the upper Radunia and its catchment in research involving the Limnological Station in Borucin, Cheese. Bad. Limnol. 3, Publisher KLUG, Gdańsk.</p> <p>Pociask - Karteczka J., (ed.), 2003, Catchment area, properties and processes, UJ IGiGP, Kraków.</p> <p>Hydrographic Map of Poland, scale 1:50,000, in analog and numerical form</p>
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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