University of Gdańsk

Subject card

Subject name and code	Hydrology - field classes, PG_00201981		
Field of study	Geography		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2027/2028
Education level	Bachelor's 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
Semester of study	4	ECTS credits	2.0
Learning profile	academic	Assessment form	credit
Conducting unit	Laboratory of Limnology -> Department of Hydrology -> Faculty of Oceanography and Geography -> Rector		
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	30.0	0.0	0.0	0.0	30

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	30	2.0	18.0	50

Subject objectives

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-U09] is able to work in a group and take on various roles within it, look after the equipment entrusted to them, and ensure their own safety and that of others.	K_U15 The student carries out the assigned tasks with due care, in accordance with their role within the group, and takes care of the equipment used during fieldwork	[SU5] implementation of a problem task [SU8] observation of student's independent or team work
[GEOGRL3-U04] can apply field and laboratory methods and research tools, spatial analysis methods, and methods of presenting research results in the field of geography, assess their usefulness for tasks in which the application goal of geography can be realized	K_U04 - the student is able to select appropriate research methods to carry out a planned research project; program content A1-A2, B1-B10	[SU6] demonstration of practical skills
[GEOGRL3-U03] can plan and conduct, independently and as part of a team, simple research in the field of geography under the supervision of a scientific advisor, based on the necessary information from professional literature and other sources	K_U03 - he student is able to plan and carry out, independently or in a group, a simple research project; program content A1-A2, B1-B10	[SU5] implementation of a problem task
[GEOGRL3-W06] knows advanced methods of acquiring, processing, and compiling geographic environmental data, as well as methods of analyzing and interpreting such data	K_W06 - the student uses statistical methods and GIS tools to analyze data obtained during a field experiment and to present it graphically; knows hydrographic mapping methods and the basics of interpreting hydrological phenomena and processes; program content A1-A2, B1-B10	[SW2] presentation/project/paper/ report [SW5] implementation of a problem task
[GEOGRL3-U01] can dentify and analyze basic natural and socio-economic processes and phenomena, analyze their causes and course, and formulate and discuss basic issues concerning physical-geographical conditions and the social, economic, and political situation and their changes on various spatial scales	K_U01 - the student is able to identify hydrographic objects and is able to analyze the connections between them and changes related not only to natural phenomena; program content A1-A2, B1-B10	[SU5] implementation of a problem task

Subject contents	Program content A. Topics of the lecture A.1. Principles of hydrographic mapping. A.2. Rules for conducting lake measurements. B. Problems of exercises B.1. Hydrographic mapping (identification of hydrographic features) B.2. Flow rate measurement using various methods. B.3. Measurement of water discharge efficiency underground. B.4. Water level measurement underground. B.5. Lake stratification lakes. B.6. Lake morphometry. B.7. Measurements of basic physical and chemical characteristics of surface and groundwater. B.8. Hydrotechnical development and water management facilities B.9. Threats and counteracting pollution of the water environment B.10. Hydrographic map of Poland at a scale of 1:50,000
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	A. Literature required to finally pass the course (pass the exam): A.1. used during classes Bajkiewicz-Grabowska E., Magnuszewski A., 2009, Guide to exercises in general hydrology, PWN, Warsaw. Gutry-Korycka M., Werner- Więckowska H., 1989, Guide to hydrographic field research, PWN, Warsaw. Instructions for preparing a hydrographic map of Poland, 1964, Doc. Geogr. IG MR. Technical guidelines K-3.4. Hydrographic map on a scale of 1:50,000, 1985, GUGiK, Warsaw. A.2. studied independently by the student Drwal J., Gołębiewski 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
	Supplementary literature	C. Additional literature Borowiak D. (ed.), 2007, Lakes of the Kashubian Landscape Park, Ser. Bad. Limn. 5, Pub. KLUG, Gdańsk. 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. Pociask - Karteczka J., (ed.), 2003, Catchment area, properties and processes, UJ IGiGP, Kraków. Hydrographic Map of Poland, scale 1:50,000, in analog and numerical form
	eResources addresses	
Example issues/ example questions/ tasks being completed	Hydrographic mapping of a given area. Taking measurements on a lake and interpreting the results. Developing your own research project.	
Work placement	Not applicable	

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