University of Gdańsk

Subject card

Subject name and code	Hydrology - field classes, PG_00201411		
Field of study	Water Management and Protection of Water Resources		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2026/2027
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	at the university
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	2.0
Learning profile	practical	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	1.0	19.0	50

Subject objectives

Understanding the causes and geographical conditions of water circulation in nature.

Spatial differentiation of hydrosphere objects and their characteristics.

Understanding the human impact on shaping the hydrosphere.

Learning the sources of hydrological information.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[GWOZWL3-U16] The student is able to demonstrate creativity in working independently and in team, taking on a variety of roles, including a leadership role.	K_U16 Is able to plan and organize work, can work independently, but also in teamwork, depending on current needs resulting from the implementation of the task can assume various roles, including skill group management	[SU5] implementation of a problem task [SU8] observation of student's independent or team work
	[GWOZWL3-K05] The student has the ability take responsibility for the safety of their own work and that of others, dealing with emergencies, exercising caution in the laboratory and in the field, responsibility for entrusted equipment and apparatus.	K_K05 Performs tasks conscientiously, taking responsibility for the entrusted person research equipment and apparatus. Works in the field and in the laboratory carefully maintaining occupational safety standards. He can adequately respond in emergency situations.	[SK8] observation of student's independent or team work
	[GWOZWL3-U02] The student can select and independently apply basic research techniques and tools, with adhering to established analytical procedures in the field of environmental research in water management, adequately to the considered research problem.	K_U02 Using his knowledge, he can choose appropriate techniques and tools used in field and laboratory research with behavior established procedures for testing the aquatic environment, appropriate to the one discussed research issues.	[SU5] implementation of a problem task
	[GWOZWL3-U01] The student can make basic observations of processes and phenomena occurring in the hydrosphere and carry out basic measurements of selected processes of water purification on a laboratory scale.	K_U01 Is able to properly observe the processes and phenomena taking place in the aquatic environment. Is able to make basic selected measurements processes and phenomena. Familiarizes himself with laboratory water analysis techniques	[SU5] implementation of a problem task
	[GWOZWL3-U15] The student by solving in groups the assigned problem situations, is able to appropriately set priorities to achieve task defined by themselves or others.	K_U15 Is able to work in a group, divide tasks appropriately in such a way that: achieve the intended goal.	[SU5] implementation of a problem task [SU8] observation of student's independent or team work
	[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.	K_W01 Knows and understands physical, chemical and biological processes and phenomena occurring in the aquatic environment. It examines mutual relationships and the course of these processes and phenomena in relation to the natural environment i anthropogenic.	[SW5] implementation of a problem task

<table>
<tr><td>Subject contents</td><td>Exercise issues

Familiarization with hydrographic objects in the field and the ability to identify them independently

Flow measurement using various methods

Recognizing the types of groundwater outflows and measuring their efficiency

Measurement of groundwater level

Hydrographic mapping

Morphometry and bathymetry of lakes

Study of the basic physical and chemical characteristics of surface and groundwater

Elements of water management

Threats and counteracting pollution of the water environment

Interpretation of the hydrographic map of Poland at a scale of 1:50,000

Concept and implementation of problem work in the field of hydrology and water management, and presentation of the obtained results - group work</td></tr>
<tr><td>Prerequisites and co-requisites</td><td>Completion of lecture and exercises in the field of hydrology and oceanography.

Knowledge of: physical geography, mathematics and statistics</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>completion of final work</td><td>51.0%</td><td>100.0%</td></tr></table></td></tr>
<tr><td>Recommended reading</td><td>Basic literature</td><td>A. Literature required for the final pass of the course:

Bajkiewicz-Grabowska E., Mikulski Z., 2002, Guide to exercises in general hydrology, PWN, Warsaw.

Drwal J., Gołębiewski R., Lange W., 1975, Borucinka River Basin as an example of a representative catchment area of the Kashubian Lake District, Zesz. Science. Department BiNOZ UG, Geography 3.

Gutry-Korycka M., Werner- Więckowska H., 1989, Guide to hydrographic field research, PWN, Warsaw. Development instructions hydrographic map of Poland, 1964, Document. Geogr. IG PAN. A.2.</td></tr>
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	Supplementary literature	B. Additional literature: Pociask-Karteczka J., (ed.), 2003, Catchment area, properties and processes, UJ IGiGP, Kraków. Terrain Information System, Hydrographic Map of Poland, scale 1:50,000 in analog and numerical form, Technical Guidelines K-3.4, 1997, GUGiK, Warsaw. Technical guidelines K 3-4. Hydrographic map on a scale of 1: 50,000, 1985, Warsaw
	eResources addresses	
Example issues/ example questions/ tasks being completed	Development of a hydrographic map of a river or lake catchment Independent performance of flow measurements and their calculation Measurements of physical and chemical parameters of lake waters and their interpretation Independent research project in the field of hydrology, using the instruments learned	
Work placement	Not applicable	

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