

**Subject card**

<b>Subject name and code</b>	Water conditions of South Baltic Coastlands and Lakelands, PG_00119830						
<b>Field of study</b>	Geography						
<b>Date of commencement of studies</b>	October 2024	<b>Academic year of realisation of subject</b>			2026/2027		
<b>Education level</b>	undergraduate studies	<b>Subject group</b>			Obligatory subject group in the field of study Optional subject group Subject group related to scientific research in the field of study		
<b>Mode of study</b>	full-time studies	<b>Mode of delivery</b>			at the university		
<b>Year of study</b>	3	<b>Language of instruction</b>			Polish polish		
<b>Semester of study</b>	6	<b>ECTS credits</b>			2.0		
<b>Learning profile</b>	academic	<b>Assessment form</b>					
<b>Conducting unit</b>	Pracownia Limnologii -> Katedra Hydrologii -> Faculty of Oceanography and Geography						
<b>Name and surname of lecturer (lecturers)</b>	<b>Subject supervisor</b>		dr Wojciech Maślanka				
	<b>Teachers</b>						
<b>Lesson types</b>	<b>Lesson type</b>	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	<b>Number of study hours</b>	20.0	0.0	0.0	0.0	0.0	20
	E-learning hours included: 0.0						
<b>Learning activity and number of study hours</b>	<b>Learning activity</b>	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	<b>Number of study hours</b>	20		7.0		23.0	50
<b>Subject objectives</b>	Knowledge of the spatial diversity of hydrographic relations in the lake districts and coastlines of the southern Baltic Sea. Discussion of events taking place in water environment processes whose course determines and conditions the hydrography and hydrology of lake areas and shores						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[GEOGRL3-U02] formulate and analyze basic problems concerning changes in physical and geographic conditions and the social, economic and political situation in local, regional and global scales	K_U02 - is able to formulate and analyze basic problems regarding changes in... physical and geographical conditions; Program content: A1-A8.	[SU4] test/exam - oral or written
	[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 - the student knows the processes and phenomena occurring in the natural environment, with particular emphasis on the processes and phenomena occurring in the area of Poland, especially the South Baltic Coast and Lake District; Content program: A1-A8.	[SW4] test/exam - oral or written
	[GEOGRL3-W05] Has advanced knowledge of the environment Earth's geographic environment, understood as a unified system of interrelated and interacting each other's components; its diversity, functioning and dynamics of change, including the mutual interaction of environmental components in the area of South Baltic Coastal and Lake Districts	K_W05 - has knowledge about the geographical environment of the Earth, understood as a uniform system of interconnected and interacting components, including the interaction of environmental components in the Coastal area and South Baltic Lake Districts; Program content: A1-A8.	[SW4] test/exam - oral or written
	[GEOGRL3-U01] identify and analyze basic natural and socio-economic processes and phenomena and analyze their causes and course	K_U01 - the student is able to identify and analyze basic processes and phenomena natural and analyze their causes and course; Program content: A1-A8	[SU4] test/exam - oral or written
	[GEOGRL3-U03] use theoretical knowledge of geographic sciences and available sources of information to correctly interpret basic natural, social, economic and political processes	K_U03 - can use theoretical knowledge in the field of geographical sciences and available sources of information for the correct interpretation of the basic ones natural processes and phenomena; Program content: A1-A8.	[SU4] test/exam - oral or written
	[GEOGRL3-U05] find and select the necessary information from professional literature and other sources, including electronic sources	K_U05 - is able to find and select necessary information from the literature professional and other sources, including electronic sources; Program content: A1-A8.	[SU4] test/exam - oral or written
	[GEOGRL3-W06] interactions between the natural and anthropogenic environment at different spatial and temporal scales, in particular the processes and phenomena occurring in the area of the South Baltic Coastal and Lake District and the determinants of these interactions	K_W06 - has knowledge about interactions between the environment natural and anthropogenic at various space-time scales area of the South Baltic Coast and Lake District and their conditions interactions; Program content: A1-A8.	[SW4] test/exam - oral or written
	[GEOGRL3-K01] to critically assess the level of one's knowledge, use it in professional activities and, in case of difficulties, to be assisted by the knowledge of experts	K_K01 - the student is able to critically refer to the level of his/her knowledge and using it in professional activities; Program content: A1-A8.	[SK4] test/exam - oral or written

Subject contents	<p>A. Topics of the lecture</p> <p>A.1 Basic definitions: water relations, components of the water cycle, natural features of coastal areas and lake districts</p> <p>A.2 Problems occurring in the sea-land contact zone (sea level rise, storm surges, water salinity, etc.)</p> <p>A.3. Characteristics of the hydrographic network and coastal waters</p> <p>A.4. Characteristics of water reservoirs: lakes, melting ponds</p> <p>A.5. Characteristics of groundwater circulation</p> <p>A.6. Marsh areas, peat bogs, coastal nature reserves dependent on water</p> <p>A.7 Areas with natural circulation and human-forced circulation.</p> <p>A.8 Quality of surface and groundwater</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	exam	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>A.2. studied independently by the student</p> <p>- Augustowski B., (ed.), 1977, Pomerania, GTN, Department V Earth Sciences, Gdańsk.</p> <p>- Augustowski B., (ed.), 1984, Pojezierze Pomorskie, GTN, Gdańsk.</p> <p>- Bajkiewicz-Grabowska E., Mikulski Z., 2002, General hydrology, PWN, Warsaw.</p> <p>- Bogdanowicz R., Fac-Beneda J., (ed.), 2009, Water resources and their protection, FRUG, Gdańsk.</p> <p>- Chelmicki W., 2002, Water. Resources, degradation, protection. Ed. Science. PWN, Warsaw.</p>	

	Supplementary literature	<p>B. Additional literature</p> <p>- Byczkowski A., 1979, Hydrological basis of water reclamation projects, PWR i L, Warsaw.</p> <p>- Major M., Cieśliński R., 2015, Retentivity as an Indicator of the Capacity of Basins without an Outlet to Accumulate Water Surpluses, Polish Journal of Environmental Studies, vol. 24, No. 6, DOI: 10.15244/pjoes/58650</p> <p>- Major M., Cieśliński R., 2017, Impact of hydrometeorological conditions on the chemical composition of water in closed-basin kettle ponds: A comparative study of two postglacial areas, Journal of Elementology, 22 (1), 151-167</p> <p>- Olszewska A., Cieśliński R., 2017, Hydrological conditions of the transport of biogenic substances in a young glacial catchment of various types use (on the example of the Zbrzyca catchment area), Gaz, Woda i Technika Sanitarna, 1/2017 (91), 33-36.</p> <p>- Partyka J., Pociask-Karteczka J., (ed.), 2008, Waters in protected areas, IG and GP UJ, Kraków.</p> <p>- Pietruszyński Ł., Cieśliński R., 2018, The effects of different land use and hydrological types on water chemistry of young glacial ponds, Journal of Hydrology, 564, 605-618.</p> <p>- Pociask-Karteczka J. (ed.), 2003, Zlewnia. Properties and processes, Ed. Jagiellonian University, Kraków</p>
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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