University of Gdańsk

Subject card

Subject name and code	Socio-economic Aspects of Water Management - lecture, PG_00201434		
Field of study	Water Management and Protection of Water Resources		
Date of commencement of studies	October 2027	Academic year of realisation of subject	2028/2029
Education level	Bachelor's studies	Subject group	Obligatory subject group in the field of study Humanistic-social subject group
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	3	ECTS credits	2.0
Learning profile	practical	Assessment form	exam
Conducting unit	Laboratory of Hydrology -> Department of Hydrology -> Faculty of Oceanography and Geography -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Katarzyna Jereczek-Korzeniewska	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	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

The aim of the course is to provide students with knowledge of the social, economic and environmental aspects of human activity in the context of water management. The course is divided into two thematic blocks:

I – the importance of water for the economy and society – the importance of water in selected sectors of the economy (agriculture, industry and services, including transport); the importance of water for the development of urban areas. The historical use of water by humans and contemporary challenges in water resource management in selected sectors of the economy and social life. The lecture covers issues at global, regional and national levels.

II – water ecosystem services – a discussion of the ecosystem services provided to humans by natural and semi-natural water systems (the economic value of these systems)

Learning outcomes

Course outcome	Subject outcome	Method of verification
[GWOZWL3-W05] assumptions of the ecosystem approach to management of the environment and human activities in the environment as well as the development directions in the field of applied solutions and scientific research for the protection and restoration of water resources in selected divisions of the national economy.	The student knows and understands the basics of how ecosystems function and how they can be managed by humans	[SW4] test/exam - oral or written
[GWOZWL3-K04] maintain a critical attitude in accepting information from various sources relating to issues in the field of water management.	The student is prepared to adopt a critical approach to information from sources relating to issues in the field of water management	[SK4] test/exam - oral or written
[GWOZWL3-W04] research techniques, methods and tools currently used in water management and the protection of water resources, in both the natural and social sciences, including basic statistical and IT tools enabling the description, modelling and interpretation of data concerning phenomena and processes occurring in the aquatic environment, as well as tools for describing relationships within socio-ecological systems.	The student defines the services provided by aquatic ecosystems and understands the relationships between aquatic ecosystems and human social and economic development	[SW4] test/exam - oral or written
[GWOZWL3-W02] the importance of advanced knowledge in the sciences allowing to understand the processes and phenomena occurring in the hydrosphere, as well as knowledge of the social sciences and of the Earth's geographic environment - as a system of interrelated and interacting components.	The student is familiar with and understands the processes and phenomena occurring in the hydrosphere and in the spheres of human socio-economic activity	[SW4] test/exam - oral or written

Subject contents

1. The importance of water for the economy and society
- the role of water in agriculture and the food economy
- the transport role of water
- the role of water in industrial development
- the role of water in urban development
- the role of water in the development of services – tourism and recreation

2. The importance of water ecosystem services
- The value of water ecosystems
- Categories of water ecosystem services

Prerequisites and co-requisites

Key competences at secondary school level; knowledge and skills from geography lessons

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
oral/written exam with open-ended questions	51.0%	100.0%

Recommended reading

Basic literature

Bajkiewicz-Grabowska, E., Mikulski, Z., 2010, General Hydrology, PWN, Warsaw
Bajkiewicz-Grabowska, E., Magnuszewski, A., 2012, A Guide to Practical Exercises in General Hydrology, PWN, Warsaw
Kaniecki A., 2004, A History of the City Written in Water, Published by the Poznań Society of Friends of Science, Poznań
Kistowski M., 2004, Selected Aspects of Nature Management in Landscape Parks, Bogucki Scientific Publishing House, Gdańsk-Poznań
Kowalczak P., 2007, Conflicts over Water, Przeźmierowo: Kurpisz S.A. Publishers, Poznań
Macias A., Bródka S., 2014, The Natural Foundations of Spatial Management, PWN Publishers, Warsaw
Mikulski Z., 1998, Water Management, PWN, Warsaw

	Supplementary literature	Kobylarczyk, J., 2012, Water in public spaces as one of the factors shaping social behaviour and the image of the city. Scientific Journals of Poznań University of Technology Kozerski, B., 2007, The Gdańsk aquifer system, Gdańsk University of Technology, Gdańsk Thier A., 2015, Axiological, economic and social issues in water management, Economy and Environment 3(54)
	eResources addresses	
Example issues/ example questions/ tasks being completed	1. access to drinking water 2. safety and security – flood and drought prevention 3. environmental awareness – educating the public about water conservation 4. economic sectors – water as a key resource for agriculture, the energy sector and industry	
Work placement	Not applicable	

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