University of Gdańsk

Subject card

Subject name and code	Ecology of inland waters, PG_00103488		
Field of study	Environmental Protection		
Date of commencement of studies	October 2025	Academic year of realisation of subject	2026/2027
Education level	Bachelor's studies	Subject group	Optional 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	4	ECTS credits	2.0
Learning profile	academic	Assessment form	credit
Conducting unit			
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Krzysztof Banaś	
	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	5.0	15.0	50

Subject objectives

1. Understanding of the phenomena and processes in aquatic biocoenoses and ecosystems and the relationship between aquatic organisms and their habitat.2. Knowledge of the specificity and role of the most important groups of organisms in freshwater ecosystems.3. Understand the relationships related to the impact of anthropopressure on the processes of inland water ecosystems.4. Knows the principles of rational use and protection of aquatic ecosystems.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OŚL3_W05] Explains the course of natural and anthropopressional physical, chemical and biological processes and phenomena occurring in nature at various levels of matter organisation.	Understands and describes the phenomena and processes that occur in freshwater ecosystems at different levels of organization. Characterizes the peculiarities and roles of the main groups of freshwater organisms.	[SW4] test/exam - oral or written
[OŚL3_W08] Explains the mechanisms of economic and consumer pressure on the environment and recognises the possibilities of reducing it using the latest knowledge and scientific achievements.	Identifies and explains the causes of anthropogenic transformation of aquatic ecosystems. Knows the principles of rational use of inland water resources and the basic methods of their protection and recultivation.	[SW4] test/exam - oral or written
[OŚL3_K05] Identifies the level of her/his knowledge and skills, demonstrates the need to update knowledge about the environment and its protection, demonstrates the need for continuous professional training and personal development.	The student sees the need to update knowledge of aquatic ecosystems and their protection, identifies the importance of the acquired knowledge and skills in this area for achieving sustainable development in the management of water resources.	[SK1] oral statement/conversation/ discussion

Subject contents	Physical and chemical properties of the freshwater environment. Thermology and oxygen conditions in lakes and rivers, factors affecting the availability of mineral and organic substances in aquatic ecosystems. Genesis and typology of water bodies. Adaptations of organisms to the conditions of the aquatic environment. Overview of basic groups of organisms and their functions in inland water ecosystems. Effects of physical, chemical and anthropogenic factors on the structure of biocoenoses in freshwater ecosystems. Anthropogenic transformation, revitalization and protection of aquatic ecosystems. Peculiarities of Pomeranian lakes - characteristics of lobelia lakes, hard-water brackish lakes, natural dystrophic lakes, oxbow lakes and eutrophic reservoirs, ponds.
Prerequisites and co-requisites	
Assessment methods and criteria	

Subject passing criteria	Passing threshold	Percentage of the final grade
Written colloquium with open questions	51.0%	100.0%

Recommended reading	Basic literature	n/a
	Supplementary literature	n/a
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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