University of Gdańsk

Subject card

Subject name and code	Hydrobiology - lecture, PG_00103330		
Field of study	Oceanography		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2024/2025
Education level	undergraduate studies	Subject group	
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	3.0
Learning profile	academic	Assessment form	
Conducting unit	Katedra Biologii Morza i Biotechnologii -> Faculty of Oceanography and Geography		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Waldemar Surosz	
	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	25.0	60

Subject objectives

Learning about the specific ecological characteristics of the aquatic environment and the associated biological adaptations of aquatic organisms

Learning outcomes

Course outcome	Subject outcome	Method of verification
OCEANL3-W02	knows and understands the basic biological processes occurring in theaquatic environment, identifies and correctly describes basic phenomena hydrobiological and natural processes occurring in the marine environment	[SW4] test/exam - oral or written
OCEANL3-W01	to an advanced degree, knows and understands the terminology appropriate in the natural sciences, with particular emphasis on hydrobiological sciences necessary for understanding the basic phenomena and processes occurring in the aquatic environment	[SW4] test/exam - oral or written

Subject contents

A.1. Specificity of conditions of life in water (physical, chemical, edaphic, biological parameters).
A.2. Biology of aquatic organisms (buoyancy, osmoregulation and ionoregulation, respiration, nutrition, reproduction).
A.3. Overview and characteristics of ecological formations: plankton, nekton, pleuston, neuston, benthos.
A.4. Ecobiological characteristics of the aquatic environment in terms of basic types of reservoirs.
A.5. Formation of ecological parameters in the littoral, sublittoral, benthal and pelagial.
A.6. Basic data on the productivity of aquatic ecosystems.
A.7. Problems of modern hydrobiology: eutrophication, acidification and saprobation.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
egzam	51.0%	100.0%

Recommended reading	Basic literature	Pliński M., 1992, General Hydrobiology, ed. University of Gdansk, (and later editions) Odum E., 1982, Fundamentals of ecology, PWRiL, Warsaw, Poland. Żmudziński L., 1974, The animal world of the Baltic Sea, WSIP Wydawnictwa Szkolne i Pedagogiczne Starmach K., Wróbel., Pasternak K., 1976, Hydrobiology, Limnology, PWN, Warsaw Thurman U., 1982, Outline of oceanology, Wydawnictwo Morskie, Gdansk, Poland.
	Supplementary literature	Chojnacki J., 1998, Basics of water ecology, Wyd. Akademii Rolniczej w Szczecinie, Szczecin Kajak Z., 1998, Hydrobiology - Limnology, Wyd. Nauk. PWN, Warsaw Mikulski J., 1982, Biology of inland waters, PWN, Warsaw Opuszyński K., 1979, Basics of fish biology, Edition: PWRiL Pliński M., 2008, Biology of marine organisms, University of Gdańsk, Gdańsk Podbielkowski Z., Tomaszewicz H., 1979, Outline of hydrobotany, PWN, Warszawa Polakowska M., 1961, Water plants Atlas, Państwowe Zakłady Wydawnictw Szkolnych Starmach K., 1973, Inland waters. Outline of hydrobiology, UJ script, Cracow Telesh I., Postel L., Heerkloss R., Mironova K., Skarlato, S. (2008). Zooplankton of the Open Baltic Sea: Atlasdansk.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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