University of Gdańsk

Subject card

Subject name and code	Microbiology - lecture, PG_00186985		
Field of study	Water Management and Protection of Water Resources		
Date of commencement of studies	October 2027	Academic year of realisation of subject	2027/2028
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	1.0
Learning profile	practical	Assessment form	credit
Conducting unit	Laboratory of Marine Biotechnology -> Department of Marine Biology and Biotechnology -> Faculty of Oceanography and Geography -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Anna Toruńska-Sitarz	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	0.0	0.0	0.0	15

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	15	1.0	9.0	25

Subject objectives

To learn about the different groups of microorganisms, to understand the nature of their interactions with other organisms, and their roles in processes taking place in aquatic environments.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[GWOZWL3-W01] 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.	W_1 [K_W01] Knows and understands, at an advanced level, the fundamental processes and phenomena occurring in aquatic environments involving microorganisms, and is able to analyse their course in the context of the entire natural environment and socio-ecological systems.	[SW4] test/exam - oral or written
[GWOZWL3-W08] advanced knowledge and understanding of the key concepts and issues within their field of study in foreign language.	Knows and is able to use basic concepts related to the field of study in English.	[SW1] oral statement/ conversation/discussion [SW3] text preparation/written work

<table>
<tr><td>Subject contents</td><td>1. Structure and diversity of aquatic microorganisms.

2. Mechanisms regulating microbial abundance and biomass.

3. The role of microorganisms in the functioning of aquatic environments.

4. Methods used in microbiological research.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td>none</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>Final exam</td><td>51.0%</td><td>80.0%</td></tr>
<tr><td>Group work (active learning)</td><td>51.0%</td><td>20.0%</td></tr>
</table></td></tr>
<tr><td>Recommended reading</td><td><table>
<tr><td>Basic literature</td><td>Bibliography used during the classes:Błaszczyk M.K., Microbiology of the environments. 2010. PWN, Warszawa;Latest scientific publications in the scope of the lecture topic.Bibliography studied independently by the student:Schlegel H.G., General microbiology. 2000, PWN; Warszawa;Recent scientific publications in the scope of the lecture topic.</td></tr>
<tr><td>Supplementary literature</td><td>-</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
</table></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td></td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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