University of Gdańsk

Subject card

Subject name and code	Challenges of the modern word - lecture, PG_00192691						
Field of study	Marine Biotechnology						
Date of commencement of studies	October 2026		Academic year of realisation of subject	2026/2027			
Education level	Master's studies		Subject group	Obligatory subject group in the field of study Optional subject group Subject group related to scientific research in the field of study			
Mode of study	full-time studies		Mode of delivery	at the university			
Year of study	1		Language of instruction	English			
Semester of study	2		ECTS credits	1.0			
Learning profile	academic		Assessment form	credit			
Conducting unit	Laboratory of Aquaculture -> Department of Marine Biology and Biotechnology -> Faculty of Oceanography and Geography -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. inż. Konrad Ocalewicz				
	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	The aim of the course is to present the main challenges facing the modern world and to analyze the global and local consequences of the violent and unpredictable events we are experiencing today.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[MBMU2-KW01] Has an in-depth knowledge and understanding of the significance, limitations and potential applications of natural marine resources in the context of the complex biological, environmental and technological factors influencing the development of biotechnology.	has in-depth knowledge of global and current changes events.	[SW1] oral statement/ conversation/discussion [SW3] text preparation/written work
[MBMU2-KK01] Is ready to critically evaluate his knowledge and continuously improve, update and upgrade his skills in the field of marine biotechnology	Is ready to critically evaluate his knowledge and constantly improve it, updating and improving qualifications in the field of current world problems, with particular emphasis on changes in the natural environment.	[SK3] text preparation/written work
[MBMU2-KU03] Can use and critically analyze available scientific information; can prepare and present - orally or in writing - a paper covering detailed problems in the field of marine biotechnology on the basis of the scientific information or their own work, with the use of scientific language, including specialized terminology and conceptual apparatus; has the ability to conduct discussions	Is able to fluently use and critically analyze available information scientific issues relating to the modern world, the natural environment, natural resources and climate change; based on them and on the basis of your own work is able to prepare and present an oral presentation and/or a written study covering detailed issues in the above-mentioned field. issues, using scientific language, including specialized terminology and conceptual apparatus; has ability to conduct discussions	[SU2] presentation/project/paper/ report [SU3] text preparation/written work

Subject contents

A1: Development and application of "new generation" tools and methods in biotechnology. A2: Genetically modified organisms controversies, prospects and limitations. A3: Carbon footprint and food production globally and locally. A4: Pandemic in the world and its consequences. A5: Global energy crisis. A6: Climate change and its consequences. A7:Overexploitation of natural resources. A8: The development of artificial intelligence and the development of biotechnology.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
quiz	51.0%	40.0%
essay	51.0%	60.0%

Recommended reading

Basic literature	Articles recommended by the instructor and independently selected by the student articles published in scientific and popular science press, documentaries, online resources and reports on current events.
Supplementary literature	Articles recommended by the instructor and independently selected by the student articles published in scientific and popular science press, documentaries, online resources and reports on current events.
eResources addresses	

Example issues/ example questions/ tasks being completed

Food production - how to reduce emission of CO2?

Work placement

Not applicable

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