

Subject card

Subject name and code	Impact of Aquaculture on the Environment - seminar, PG_00201257						
Field of study	Aquaculture – Business And Technology						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2028/2029		
Education level	Bachelor’s studies		Subject group		Obligatory subject group in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	3		Language of instruction		Polish		
Semester of study	6		ECTS credits		2.0		
Learning profile	practical		Assessment form		credit		
Conducting unit	Laboratory of Biodiversity and Benthic Functioning -> Department of Marine Ecology -> Faculty of Oceanography and Geography -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Urszula Janas, prof. UG				
	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		2.0		18.0	50
Subject objectives	The purpose of the course is to familiarize the student with the topic of the impact of aquaculture on the environment. During the course, the student will gain knowledge of the need to develop aquaculture in a sustainable manner.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[AKWAL3-K06] is ready to think and act in an entrepreneurial manner in terms of actions taken, including social initiatives, cooperation for environmental sustainability and sustainable development		He or she is willing to think and act to preserve the ecological balance and sustainable development of aquaculture		[SK2] presentation/project/paper/report		
	[AKWAL3-U12] can interact and work in a group, and assume different roles		He or she can interact and work in a group, taking on different roles while working on projects and case studies		[SU2] presentation/project/paper/report		
	[AKWAL3-W12] knows and understands the role of aquaculture in the modern economy and its impact on the natural environment		He or she knows and understands the impact of aquaculture on the natural environment		[SW3] text preparation/written work		
	[AKWAL3-U07] can come to the right conclusions on the basis of available data		He or she is able to make correct conclusions on the basis of available data on the environmental impacts of aquaculture		[SU2] presentation/project/paper/report		

Subject contents	Sustainable development of aquacultures Threats to the natural environment and ecological balance, among others, eutrophication, oxygen deficiency, alien species, pharmaceuticals and other compounds used in aquaculture, diseases transmitted to natural populations, loss of land for other activities; Benefits of aquaculture development, among others, production of food and other products necessary for humans; Assessment of the impact of aquaculture on the aquatic environment; Biomonitoring of the environment in the vicinity of aquaculture; Environmental impact assessments of aquaculture projects, forecasting the impact of future aquaculture projects on the environment, using the DPSiR and Life Cycle Assessment (LCA) model and Nature Based Solutions, among others.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	presentation 2 /project	51.0%	35.0%
	presentation 1 /project	51.0%	35.0%
	written work	51.0%	30.0%
Recommended reading	Basic literature	Gray J., Elliott M., 2010, Ecology of Marine sediments from science to management, Oxford University Press James S. D. 2009, Aquaculture production and biodiversity conservation, BioScience 59 (1): 2738. Schultz-Zehden A, Matczak M. (eds.), 2012, Compendium An Assessment of Innovative and Sustainable Uses of Baltic Marine Resources, Instytut Morski, Gdańsk, 262 str.	
	Supplementary literature	Zimna J., Przedrzymirska J., Matczak M., Zaucha J., 2013, Mapa Drogowa rozwoju polskich obszarów nadmorskich opartego na czerpaniu pożytków z innowacyjnych form wykorzystania zasobów Bałtyku, Instytut Morski, Gdańsk, 68 str	
	eResources addresses		
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

Document generated electronically. Does not require a seal or signature.