University of Gdańsk

Subject card

Subject name and code	Ecotoxicology in Aquaculture - laboratory classes, PG_00201300						
Field of study	Aquaculture – Business And Technology						
Date of commencement of studies	October 2026		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	2		Language of instruction		Polish		
Semester of study	3		ECTS credits		2.0		
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 Agata Błaszczyk				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	30.0	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	To introduce students to the effects of anthropogenic pollution and natural substances on organisms cultivated in aquaculture (ecotoxicological tests, toxicity assessment, biomarker studies). To learn about environmental risk assessment methods.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[AKWAL3_W03] has an advanced understanding of the conceptual categories and terminology related to the biological basis of aquatic organisms breeding, as well as concepts directly relevant to the practical applications of this knowledge	W_1 [K_W03] student knows and understands the conceptual categories and terminology concerning the effects of anthropogenic pollution and natural substances on organisms in aquaculture. student knows and understands concepts directly relevant to the practical applications of this knowledge [A1-A3].	[SW4] test/exam - oral or written [SW3] text preparation/written work
[AKWAL3-U02] can make observations and perform simple physical / biological / chemical measurements that are typical in socio-economic activity based on natural sciences	U_1 [K_U02] student is able to make observations and measurements concerning the effects of pollutants on farm organisms [A1-A3].	[SU8] observation of student's independent or team work
[AKWAL3-U07] can come to the right conclusions on the basis of available data	U_2 [K_U07] student is able to make correct conclusions on the basis of ecotoxicological tests [A1-A2].	[SU8] observation of student's independent or team work
[AKWAL3-K03] is ready to follow the ethical principles in biological research and adhere to the principles of intellectual honesty	K_1 [K_K03] student is ready to respect the principles of ethics in ecotoxicological studies ecotoxicology research and to observe the principles of intellectual honesty [curricular content [A1, A2]	[SK8] observation of student's independent or team work

Subject contents

1 Ecotoxicological tests in toxicological risk assessment.2. Biomarkers in the assessment of exposure and effects.3. Detection and characterisation of harmful substances by chemical methods.

Prerequisites and co-requisites

not required

Assessment methods and criteria

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

Recommended reading

Basic literature	1. Walker C.H., Hopkin S.P., Sibly R.M., Peakall B., 2002. Podstawy Ekotoksykologii, PWN, Warszawa 2. Laskowski R., Migula P., 2004. Ekotoksykologia od komórki do ekosystemu, Państwowe Wyd. Rolnicze i Leśne, Warszawa 3. Klaassen J.B., Watkins III J.B., 2014. Podstawy Toksykologii, MedPharm Polska 4. Manahan S.E., 2006. Toksykologia środowiska. PWN, Warszawa 5. Cole D.W., Cole R., Gaydos S.J., Gray J., Hyland G., Jacques M.L., Powell-Dunford N., Sawhney C., Au W.W. 2009. Aquaculture: Environmental, toxicological, and health issues. Int. J. Hyg. Environ. Health 212 (2009) 369377
Supplementary literature	-
eResources addresses	

Example issues/ example questions/ tasks being completed

Work placement

Not applicable

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