

Subject card

Subject name and code	Ecotoxicology, PG_00054832						
Field of study	Environmental Protection						
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 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		Polish		
Semester of study	1		ECTS credits		1.0		
Learning profile	academic		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	15.0	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		2.0		8.0	25
Subject objectives	The aim of the training is to learn about the ecological effects resulting from environmental contamination by chemical compounds (effects at organism and ecosystem level).						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[OŚMU2_U02] Uses advanced measurement and analytical techniques used in environmental protection.	Student is able to select methods specific to the assessment of ecological effects of pollution.	[SU2] presentation/project/paper/report
	[OŚMU2_K01] Behaves in a professional manner at all times; bears full responsibility for the actions taken relating to the protection of the environment and respects the principles of professional ethics and principles of intellectual honesty.	1.Student indicates the need for continuous learning. 2. Student recognizes and solves dilemmas connected with performing assessment of environment exposure to pollution, understands the need to reflect on ethical issues. 3. Student is aware of the threats resulting from the emission of pollutants to the environment.	[SK1] oral statement/conversation/discussion
	[OŚMU2_K07] Is willing to undertake individual and team activity; to professionally plan and organise its course and set priorities for their actions.	1. Student understands the need for continuing education. 2. Student identifies and resolves dilemmas related to the performance of environmental exposure assessment environment and understands the need to reflect on the ethical issues. 3. Student is aware of the risks of pollutant emissions to the environment.	[SK1] oral statement/conversation/discussion
	[OŚMU2_W06] Analyses the impact of human activities on biodiversity and environmental quality on a local, regional and global scale.	1. Student knows the fate of pollutants in organisms and the environment and the factors that affect them. 2. Student is aware of the concepts and terms used in contemporary ecotoxicological literature. 3. Student knows the basic research methods used in ecotoxicology.	[SW4] test/exam - oral or written
	[OŚMU2_U03] Plans and performs research tasks in the field or laboratory and interprets research results on environmental issues (working individually or in a team assuming various roles, including managerial functions).	1. Student uses relevant literature and information on ecotoxicology; critically evaluates available resources. 2. Student conducts and interprets basic tests used in performance assessment.	[SU2] presentation/project/paper/report [SU6] demonstration of practical skills
	[OŚMU2_W03] Characterises the effects of human interference in the natural environment and explains the mechanisms of reaction of living organisms to its pollution.	1. Student knows the sources and laws determining the spread of pollution in ecosystems. 2. Student knows the fate of pollutants in organisms and the environment and the factors that affect them. 3. Student knows the ecological effects of the main groups of pollutants and methods of assessing them.	[SW4] test/exam - oral or written
Subject contents	1. Ecotoxicological assays. 2. Application of biomarkers in ecotoxicology.		
Prerequisites and co-requisites	Knowledge of basic chemistry, biology and ecology. Ability to use a variety of information sources; reading comprehension in English.		
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. Wierzbicka M., 2021. Ekotoksykologia, Wydawnictwo Uniwersytetu Warszawskiego 4. Manahan S.E., 2006. Toksykologia środowiska. PWN, Warszawa 5. Traczewska T.M., 2011. Biologiczne metody oceny skażenia środowiska. Oficyna Wydawnicza Politechniki Wrocławskiej	
	Supplementary literature	-	
	eResources addresses		
Example issues/ example questions/ tasks being completed	-		

Work placement	Not applicable
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