University of Gdańsk

Subject card

Subject name and code	Ecotoxicology, PG_00054830		
Field of study	Environmental Protection		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2024/2025
Education level	postgraduate 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	1	Language of instruction	Polish Polish
Semester of study	1	ECTS credits	2.0
Learning profile	academic	Assessment form	
Conducting unit	Pracownia Biotechnologii Morskiej -> Katedra Biologii Morza i Biotechnologii -> Faculty of Oceanography and Geography		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Agata Błaszczyk	
	Teachers	dr Agata Błaszczyk	

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	2.0	33.0	50

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_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
[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_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_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_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_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

Subject contents

1. Scope of ecotoxicology, basic terminology, founders of ecotoxicology and its history. 2. General classification of compounds posing the greatest threat to the environment. 3. Transport and transformation of pollutants in the environment and organisms. 4. Effects of pollutants on organism, populations and ecosystem. 5. Methods of ecotoxicological research.

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	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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