University of Gdańsk

Subject card

Subject name and code	Anthropogenic conversion of land ecosystems, PG_00103528						
Field of study	Environmental Protection						
Date of commencement of studies	October 2026		Academic year of realisation of subject	2028/2029			
Education level	Bachelor's studies		Subject group	Optional subject group			
Mode of study	full-time studies		Mode of delivery	at the university			
Year of study	3		Language of instruction	Polish			
Semester of study	5		ECTS credits	2.0			
Learning profile	academic		Assessment form	credit			
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor	dr Renata Afranowicz-Cieślak					
	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		5.0	15.0	50	
Subject objectives	• Understanding the cause and effect relationships between human activities and changes in nature. • Knowledge of changes in terrestrial nature caused by anthropopressure and the ability to determine the causes and mechanisms of these changes. • Familiarization with research methods for changes in terrestrial ecosystems.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OŚL3_W08] Explains the mechanisms of economic and consumer pressure on the environment and recognises the possibilities of reducing it using the latest knowledge and scientific achievements.	- determines and distinguishes the effects of various forms of anthropopressure on nature, identifies their causes based on the visible effects of changes - characterizes the levels of biological diversity and interactions between organisms and the environment, recognizes disturbances in these interactions - assesses the state of preservation of natural and human modified natural systems	[SW4] test/exam - oral or written
[OŚL3_W05] Explains the course of natural and anthropopressional physical, chemical and biological processes and phenomena occurring in nature at various levels of matter organisation.	- has and uses knowledge of biology, ecology and other natural sciences in the description of basic changes in nature - knows the relationship between the nature and intensity of changes in flora, fauna, ecosystems and landscapes and the forms of human activity in time and space - recognizes and explains the course of natural and anthropogenic-induced biological processes and phenomena occurring in nature at various levels of its organization	[SW4] test/exam - oral or written
[OŚL3_U04] Uses specialist language in the discussion and properly uses the nomenclature in the field of environmental protection and individual disciplines related to it.	- demonstrates the ability to make correct inferences based on data from various sources - assesses the functioning of natural and human-modified natural systems and determines the impact of anthropopressure on specific processes occurring in the natural environment - assesses the regenerative possibilities of animate and inanimate nature - correctly uses terminology in the field of ecology and other related disciplines	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written
[OŚL3_K05] Identifies the level of her/his knowledge and skills, demonstrates the need to update knowledge about the environment and its protection, demonstrates the need for continuous professional training and personal development.	- sees the need for continuous professional education, updating knowledge about the environment and personal development	[SK1] oral statement/conversation/ discussion
[OŚL3_W09] Describes the basic methods, techniques and tools that allow the rational use, shaping and restoration of natural resources.	- knows the basic methods, techniques and tools for learning about changes in nature	[SW4] test/exam - oral or written
[OŚL3_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.	- performs a critical selfassessment of one's own competences	[SK1] oral statement/conversation/ discussion

Subject contents

Causes of ecosystem transformations. Dependence of the nature and intensity of changes in flora, fauna, biocenoses and habitats on the forms and intensity of human activity. Changes in ecosystems at various stages of the development of human civilization. Methods of researching changes depending on the spatial and temporal scale. Changes in habitats, phytocoenoses and zoocenoses - their mutual connections; changes at the landscape level. Synanthropization causes, mechanism, effects. The degree of naturalness of ecosystems and their susceptibility to anthropopressure. Degeneration of plant communities. Replacement of plant communities (mainly in relation to the vegetation of Poland). Natural and economic consequences of ecosystem changes. Global transformations, including global warming. Environmental impact assessments.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
written final paper - test	51.0%	100.0%

Recommended reading	Basic literature	Fudali E. 2009. Anthropogenic changes in ecosystems. Vegetation transformations. Ed. Univ. Przyr., Wrocław, 78 pp.Afranowicz-Cieślak R. 2011. The share and role of anthropophytes in the flora of tree stands in the agricultural landscape of Żuławy Wiślane. Acta Botanica Silesiaca 6: 153-166.Olaczek R. 1976. Changes in the plant cover of Poland from the mid-19th century to the present. Zesz. Problem Lent. Agricultural Sciences. 177.
	Supplementary literature	Faliński J.B., Adamowski W., Jackowiak B. 1998. Synanthropization of plant cover in new Polish research. Phytocoenosis 9: 1-279.Starkel L. 1991. Geography of Poland. The natural environment. Ed. PWN, Warsaw.Szafer W., Zarzycki. 1972. Plant cover of Poland. Vol. 1. PWN, Warsaw.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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