University of Gdańsk

Subject card

Subject name and code	Structure and functioning of land ecosystems, PG_00050819		
Field of study	Environmental Protection		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2026/2027
Education level	undergraduate 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	5	ECTS credits	1.0
Learning profile	academic	Assessment form	
Conducting unit	Pracownia Ekologii Wód Słodkich -> Katedra Ekologii Roślin -> Faculty of Biology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Krzysztof Banaś	
	Teachers		

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	8.0	25

Subject objectives

1. To give basic knowledge of the complexity of the structure of terrestrial ecosystems and the reasons for their variation in time and space.

2. To learn about the principles of terrestrial ecosystems.

3. To be able to assess threats to terrestrial ecosystems.

4. To understand natural phenomena and processes.

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<tr><td>Learning outcomes</td><td>
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<tr><th>Course outcome</th><th>Subject outcome</th><th>Method of verification</th></tr>
<tr><td>[OŚL3_K06] Knows and appreciates the practical application of the acquired knowledge and skills in solving problems.</td><td>appreciates the knowledge and skills acquired and demonstrates responsibility for the environment and its protection through the need for continuing education</td><td>[SK1] oral statement/conversation/ discussion
[SK8] observation of student's independent or team work</td></tr>
<tr><td>[OŚL3_U08] Correctly concludes based on the available data from various sources.</td><td>on the basis of available data, assesses the structure and functioning of various types of terrestrial ecosystems and predicts changes in their natural character as a result of anthropogenic impacts</td><td>[SU4] test/exam - oral or written</td></tr>
<tr><td>[OŚL3_W06] Characterises levels of life organization, biodiversity and the interaction of organisms and the environment.</td><td>characterizes the structure and species diversity of terrestrial biocoenoses and explains their relationship to the biotope</td><td>[SW4] test/exam - oral or written</td></tr>
<tr><td>[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.</td><td>distinguishes between natural and anthropogenic processes in the terrestrial environment and explains their impact on the various elements of the ecosystem</td><td>[SW4] test/exam - oral or written</td></tr>
<tr><td>[OŚL3_W01] Discusses the basic concepts of mathematics, physics, chemistry and biology. Describes physical, chemical and biological phenomena occurring in nature as well as geological, geomorphological and climatic conditions of the functioning of nature.</td><td>defines the processes that determine the functioning of terrestrial ecosystems and explains the rate at which they occur depending on geological and climatic conditions</td><td>[SW4] test/exam - oral or written</td></tr>
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<tr><td>Subject contents</td><td>The origin of land, the theory of plate tectonics, theories of the origin of life, the exit of plants and animals on land. Primary production, secondary production, decomposition and deposition of organic matter, circulation of elements and trophic network in terrestrial ecosystems. Phenomena and processes determining the composition and species richness of ecosystems. Structure and functioning of ecosystems of wetlands, deserts, semi-deserts, steppes, forests and others. Threats and degradation of terrestrial ecosystems.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></td></tr>
<tr><td>Assessment methods and criteria</td><td>
<table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>Written colloquium with open questions</td><td>51.0%</td><td>100.0%</td></tr>
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<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>n/a</td></tr>
<tr><td>Supplementary literature</td><td>n/a</td></tr>
<tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:</td></tr>
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<tr><td>Example issues/ example questions/ tasks being completed</td><td></td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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