University of Gdańsk

Subject card

Subject name and code	Plant ecology, PG_00154442		
Field of study	Biology		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2028/2029
Education level	Bachelor's studies	Subject group	Obligatory subject group in the field of study Optional subject group 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	3	Language of instruction	Polish
Semester of study	5	ECTS credits	1.0
Learning profile	academic	Assessment form	exam
Conducting unit	Laboratory of Freshwater Ecology -> Department of Plant Ecology -> Faculty of Biology -> Rector		
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 impart basic knowledge of the biology and ecology of plants, the structure and dynamics of their populations and communities.
2. ability to diagnose the natural environment on the basis of the acquired knowledge.
3. ability to describe the phytocenosis in the light of the concept of population structure of vegetation.

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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>[BIOLL3_K01] The graduate is prepared to evaluate his/her own knowledge, understand the need for continuous learning and development, and is open to new ideas</td><td>Recognizes, appreciates and promotes the knowledge of plant ecology in the protection of the environment, especially nature</td><td>[SK4] test/exam - oral or written</td></tr>
<tr><td>[BIOLL3_U05] The graduate will be able to synthesise data from a variety of sources and draw appropriate conclusions</td><td>demonstrates the ability to critically analyze and select information on ecological phenomena and processes at different levels of nature's organization</td><td>[SU4] test/exam - oral or written</td></tr>
<tr><td>[BIOLL3_U07] The graduate should be able to independently search for and use available sources of biological information, including electronic sources</td><td>demonstrates the ability to critically analyze and select information on ecological phenomena and processes, use available sources of ecological information</td><td>[SU4] test/exam - oral or written</td></tr>
<tr><td>[BIOLL3_W05] The graduate knows the rules and describe the mechanisms of life at the population, biocenosis and ecosystem levels and the temporal and spatial determinants of biodiversity</td><td>explains the basic rules and describes the mechanisms of population, phytocenosis and ecosystem functioning, as well as the spatial determinants of biodiversity</td><td>[SW4] test/exam - oral or written</td></tr>
<tr><td>[BIOLL3_W07] The graduate is conversant with the types of natural environments (habitats) from a structural and functional perspective, as well as the selected species of flora and fauna of coastal areas and the methods and forms of nature conservation</td><td>names and describes the basic ecological processes at different levels of nature's organization (individual, population, phytocenosis)</td><td>[SW4] test/exam - oral or written</td></tr>
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<tr><td>Subject contents</td><td>Review of general biological and ecological theories. Adaptations to environmental conditions. Levels of organization. Structure, dynamics, demography and spatial organization of populations. Reproduction, mortality, sex and age distribution of populations. Mathematical models of population growth and survival. Theoretical basis for predicting the fate of populations. Coexistence of plants and animals. Structure and dynamics of phytocoenoses. Succession, regression, degeneration and regeneration of phytocenoses. Persistence of vegetation in time and space.</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 exam</td><td>51.0%</td><td>100.0%</td></tr>
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<tr><td>Recommended reading</td><td>
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<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></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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