University of Gdańsk

Subject card

Subject name and code	Plant ecology, PG_00128789		
Field of study	Biology		
Date of commencement of studies	October 2022	Academic year of realisation of subject	2024/2025
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	English
Semester of study	6	ECTS credits	2.0
Learning profile	academic	Assessment form	credit
Conducting unit	Department of Plant Ecology -> Faculty of Biology -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	mgr Rafał Ronowski	
	Teachers	mgr Rafał Ronowski	

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	11.0	24.0	50

Subject objectives

Provide basic knowledge of plant ecology - the structure and functioning of vegetation.

Indication of the role of plants in diagnosing environmental changes in various time scales.

Learning outcomes

Course outcome	Subject outcome	Method of verification
	B_W05 – the student knows and understands the basic rules and describes the mechanisms of life functioning at the level of population, biocenosis and ecosystem as well as temporal and spatial determinants of biological diversity. B_W16 – the student knows and explains a relationships between achievements of a selected field of science and the discipline of natural sciences, and the possibilities of their use in socio-economic life, taking into account the sustainable use of biological diversity	[SW3] text preparation/written work [SK8] observation of student's independent or team work

<table>
<tr><td>Subject contents</td><td>- Theories, ecological phenomena and processes

- The organization of plant systems (individual, population, community, ecosystem)

- Life strategies of plant species

- Functional and structural diversity of vegetation

- Application of plant ecology in the assessment of the natural and cultural environment

- Bioindicator value of plants in the reconstructions of the long-term environmental changes

- Plant Interactions with other groups of organisms</td></tr>
<tr><td>Prerequisites and co-requisites</td><td>Fundamentals of plant biology</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>Class attendance, essey covering the content of the lecture</td><td>51.0%</td><td>100.0%</td></tr></table></td></tr>
<tr><td>Recommended reading</td><td><table><tr><td>Basic literature</td><td>1. Grime J.P. 2002. Plant strategies, vegetation processes and ecosystem
properties. Wiley & Sons Ltd., Chichester.

2. Maarel E., van der. 2006. Vegetation ecology. Blackwell Publ.

3. Schulze E. D., Beck E., Buchmann N., Clemens S., MüllerHohenstein K., SchererLorenzen M. 2019. Plant Ecology, 2nd ed. Springer-Verlag GmbH, Germany.

4. Alverson K.D., Bradley R.S., Pedersen T.F. 2003. Paleoclimate, Global Change and the Future. Springer, Berlin-Heidelberg-New York.

5. Elias i in. 2005-2007. Encyclopedia of Quaternary Sciences. Elsevier.</td></tr><tr><td>Supplementary literature</td><td>1. Silvertown J. W., Lovett Doust J. 1993. Introduction to plant population biology, 3rd edn. Blackwell Scientific Publications, Oxford.

2. Keddy P.A. 2017. Plant Ecology. Origins, Processes, Consequences. 2nd ed., Cambridge University Press.

3. Pugnaire F., Valladares F., eds. 2007. Handbook of Functional Plant Ecology (Books in Soils, Plants, and the Environment) 2edn. CRS Press, Taylor & Francis Group.

4. Gornitz V. (red.). 2009. Encyclopedia of paleoclimatology and ancient environments. Springer, Dordrecht, The Netherlands.

5. Mackay A., Battarbe R., Birks J., Oldfield F. 2003. Global change in the Holocene. Arnold, New York.</td></tr><tr><td>eResources addresses</td><td></td></tr></table></td></tr>
<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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