University of Gdańsk

Subject card

Subject name and code	Plant ecology, PG_00128789		
Field of study	Biology		
Date of commencement of studies	October 2023	Academic year of realisation of subject	2025/2026
Education level	Bachelor's studies	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_K01 The student knows the limitations of their own knowledge and understands the need for continuous learning and development and is open to new ideas. B_U06 - The student can read simple scientific biological texts in Polish and simple texts in English B_U08 - the student is able to learn independently, in a directed manner B_W05 - The student knows and understands the basic principles and describes the mechanisms of life functioning at the population, biocenosis, and ecosystem levels, as well as the temporal and spatial conditions of biodiversity. B_W16 - the student knows and explains the relationships between the achievements of a selected field of science and natural sciences and the possibilities of their use in social and economic life, taking into account the sustainable use of biodiversity	[SK3] text preparation/written work [SK8] observation of student's independent or team work

Subject contents

- 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

Prerequisites and co-requisites

Fundamentals of plant biology

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Class attendance, essey covering the content of the lecture	51.0%	100.0%

Recommended reading	Basic literature	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.
	Supplementary literature	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.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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