


KAPITAŁ LUDZKI
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez
 Unię Europejską w ramach
 Europejskiego Funduszu
 Społecznego

UNIA EUROPEJSKA
 EUROPEJSKI
 FUNDUSZ SPOŁECZNY


Course title		ECTS code	
Plant ecology		13.1.1445	
Name of unit administrating study			
null			
Studies			
faculty	field of study	type	first tier studies (BA), second tier studies (MA)
Faculty of Biology	Medical Biology	form	full-time
		specialty	all
		specialization	all
Faculty of Biology	Biology	type	first tier studies (BA), second tier studies (MA)
		form	full-time
		specialty	all
Faculty of Biology	Genetics and Experimental Biology	specialization	all
		type	first tier studies (BA)
		form	full-time
Faculty of Chemistry	Chemistry	specialty	all
		specialization	all
		type	second tier studies (MA)
		form	full-time
		specialty	all
		specialization	all
Teaching staff			
mgr Rafał Ronowski; dr Rafał Chmara; dr Joanna Święta-Musznicka; dr hab. Wojciech Pokora, profesor uczelni; dr Anna Pędziszewska; mgr Olga Antczak-Orlewska; dr hab. Monika Badura, profesor uczelni			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		2	
Lecture		Work in contact with the teacher:	
The realization of activities		participation in lectures - 15 hours	
classroom instruction, online classes		consultations with the lecturer - 9 hours	
Number of hours		exam - 2 hours	
Lecture: 15 hours		The individual student work:	
		preparation of the essay - 20 hours	
		studying the literature and materials for classes - 4 hours	
		Total: 50	
The academic cycle			
2022/2023 summer semester			
Type of course		Language of instruction	
an elective course		english	
Teaching methods		Form and method of assessment and basic criteria for evaluation or examination requirements	
Lecture with multimedia presentation		Final evaluation	
		Graded credit	
		Assessment methods	
		Essay	
		The basic criteria for evaluation	
		Class attendance, essey covering the content of the lecture	
Method of verifying required learning outcomes			
Required courses and introductory requirements			
A. Formal requirements			

Fundamentals of plant biology	
B. Prerequisites none	
Aims of education	
The aim of the lecture is: - to provide basic knowledge of plant ecology - the structure and functioning of vegetation. - to indicate of the role of plants in diagnosing environmental changes in various time scales.	
Course contents	
<ul style="list-style-type: none"> - 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 	
Bibliography of literature	
A. Literature required for the final course credit (exam):	
<u>A.1. used during the class</u>	
<ol style="list-style-type: none"> 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., Müller Hohenstein K., Scherer Lorenzen M. 2019. Plant Ecology, 2nd ed. Springer-Verlag GmbH, Germany. 	
<u>A.2. studiowana samodzielnie przez studenta</u>	
<ol style="list-style-type: none"> 1. Alverson K.D., Bradley R.S., Pedersen T.F. 2003. Paleoclimate, Global Change and the Future. Springer, Berlin-Heidelberg-New York. 2. Elias i in. 2005-2007. Encyclopedia of Quaternary Sciences. Elsevier. 	
B. Supplementary literature	
<ol style="list-style-type: none"> 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. 	
The learning outcomes (for the field of study and specialization)	Knowledge
	<ul style="list-style-type: none"> • 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. • 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
	Skills
	<ul style="list-style-type: none"> • the student can read simple scientific biological texts in Polish and simple texts in English • the student can learn independently, in a targeted manner
	Social competence
	<ul style="list-style-type: none"> • the student knows the limits of their own knowledge and understands the need for constant learning and development, and is open to new ideas
Contact	
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