



KAPITAŁ LUDZKI NARODOWA STRATEGIA SPÓJNOŚCI

Projekt współfinansowany przez Unię Europejską w ramach Europejskiego Funduszu Społecznego

UNIA EUROPEJSKA EUROPEJSKI FUNDUSZ SPOŁECZNY





Course title

Vertebrate Ecology

ECTS code 13.1.1460

Name of unit administrating study

null					
Studies					
feaulty	field of otype	h	first tiss studies (DA)		
faculty Intercollegiate Faculty of	field of study		first tier studies (BA)		
	Biotechnology		full-time		
Biotechnology UG-MUG		specialty			
		specialization			
Faculty of Biology	Medical Biology		first tier studies (BA), second tier studies (MA)		
			full-time		
		specialty			
		specialization			
Faculty of Biology	Biology		first tier studies (BA), second tier studies (MA)		
			full-time		
		specialty			
		specialization			
Faculty of Biology	Genetics and		first tier studies (BA)		
	Experimental Biology	form	full-time		
		specialty	all		
		specialization	all		
Faculty of Biology	Natural Resources	type	first tier studies (BA)		
	Conservation	form	full-time		
		specialty	all		
		specialization			
Faculty of Chemistry	Chemistry		first tier studies (BA)		
			full-time		
		specialty	all		
		specialization			
Faculty of Economics	Economics		first tier studies (BA)		
			full-time		
		specialty			
		specialization			
Faculty of History	History		first tier studies (BA)		
			full-time		
		specialty			
		specialization			
Faculty of Mathematics,	Physics		first tier studies (BA)		
Physics and Informatics			full-time		
Finysics and mornalics		specialty			
		specialization			
Faculty of Mathematics,	Mathematics		first tier studies (BA)		
•	Mathematics		full-time		
Physics and Informatics					
		specialty			
		specialization	all		

Teaching staff

Forms of classes, the realization and number of hours	ECTS credits	
Forms of classes		
Wykład (to translate)		
The realization of activities		
blended learning, lectures in the classroom		
Number of hours		
Wykład (to translate): 30 hours		

2021/2022 winter semester

Type of course

Sylabusy - Centrum Informatyczne UC



3 Estimation of working time: Working in contact with teacher – 30 hours Consultations – 5 hours The unassisted student work (studying the literature, preparing for the reports, presentations, tests and exams – 25 hours Total: 60 hours

Language of instruction

elective (to translate)	english
Teaching methods	Form and method of assessment and basic criteria for eveluation or examination requirements
Lectures with multimedia presentations	Final evaluation
	Egzamin (to translate)
	Assessment methods
	Written exam
	The basic criteria for evaluation
	Assessment criteria or examination requirements:
	Obtaining 51% points on the exam: giving correct answers to more than half of the
	questions; attendance of at least 85% of lectures

Sposób weryfikacji założonych efektów kształcenia (DO TŁUMACZENIA)

examination sheets

Required courses and introductory requirements

A. Formal requirements

none

B. Prerequisites

none

Aims of education

- · To introduce students to the scope of ecological studies of vertebrates according to the current knowledge
- To deepen the knowledge of the reactions of vertebrates (physiological, behavioural, population) to environmental factors
- · To deepen the knowledge of the inter- and intraspecific ecological interactions in vertebrates
- To discuss factors and mechanisms regulating the abundance and distribution of individuals within the population
- To present and discuss relations between vertebrate ecology and management of fauna resources (fauna protection and conservation,
- exploitation of vertebrate populations, limitation of the number of alien and invasive species)

Course contents

Lecture content:

The lecture will cover a broad range of topics in vertebrate ecology, including the reactions of vertebrates (physiological, behavioural, population, evolutionary) to environmental factors. Environmental resources and their exploitation by vertebrates. Species/population distribution, habitat preferences. Methods and foraging strategies of vertebrates. Vertebrate populations: demography, number and distribution limitations. Inter- and intraspecific interactions. Applied ecology: protection, exploitation and abundance regulation in vertebrate populations. Case studies.

Bibliography of literature

A. Literatura wymagana do ostatecznego zaliczenia zajęć (zdania egzaminu):

Begon M., Towsend CR., Harper JL. 2006. Ecology: from individuals to Ecosystems. 4. Ed. Blackwell.

Cain ML., Bowman WD., Hacker SD.2008. Ecology. Sinauer. Sunderland.

- Krebs CJ. 2013. Ecology: The Experimental Analysis of Distribution and Abundance. Pearson.
- Singer F. D. 2016. Ecology in Action. Cambridge Univ. Press. Cambridge

Townsend C.R., Begon M., Harper J.L. 2003. Essential of ecology. Blackwell

B. Literatura uzupełniająca

Begon, M., Mortimer, M. and Thompson, D.J. (1996) Population ecology A unified study of animals and plants. Blackwell Science, Oxford. Nowak S., Mysłajek R.W., Szewczyk M., Tomczak P., Jędrzejewska B. (2017) Sedentary but not dispersing wolves Canis lupus recolonising Western



Poland (2001-2016) conform to the predictions of Habitat Suitability Model. Diversity and Distributions 23:1231–1364. Van Gils J. A., Lisovski S., Lok T., Meissner W., Ożarowska A., de Fouw J., Rakhimberdiev E., Soloviev M. Y., Piersma T., Klaassen M. 2016. Body shrinkage due to Arctic warming reduces red knot fitness in tropical wintering range. Science 352 (6287): 819-821; doi: 10.1126/science.aad6351		
Science 352 (0207). 019-021, 001. 10.1120/Science.ad00331	Knowledge	
	 - understands ecological interactions and reactions of vertebrates to biotic and abiotic factors (physical, chemical factors etc., inter- and intraspecific interactions etc.) - understands ecological phenomena and processes at various levels of complexity - recognizes anthropogenic impact on vertebrates at an individual, population and biocenoses levels, - recognizes the importance of ecological interactions in protection and conservation of vertebrates 	
	Skills	
	 selects and applies basic statistics, techniques and tools to describe ecological phenomena and analyse ecological data, interprets results and concludes on ecological phenomena, like vertebrate species/population abundance and distribution, as well as inter- and intraspecific interactions 	
	Social competence	
	 systematically updates biological and ecological knowledge and information about its practical applications in nature conservation 	
Contact		
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