


KAPITAŁ LUDZKI
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez
 Unię Europejską w ramach
 Europejskiego Funduszu
 Społecznego

UNIA EUROPEJSKA
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 FUNDUSZ SPOŁECZNY


Course title		ECTS code	
Vertebrate Ecology		13.1.1460	
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 Biology	Natural Resources Conservation	specialty	all
		specialization	all
		type	first tier studies (BA)
		form	full-time
		specialty	all
		specialization	all
Teaching staff			
dr Agnieszka Ożarowska; dr hab. Wojciech Pokora, profesor uczelni; Maciej Szewczyk			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		3	
Lecture		Estimation of working time:	
The realization of activities		Working in contact with teacher – 30 hours	
classroom instruction, online classes		Consultations – 5 hours	
Number of hours		The unassisted student work (studying the literature, preparing for the reports, presentations, tests and exams – 25 hours	
Lecture: 30 hours		Total: 60 hours	
The academic cycle			
2022/2023 winter 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	
Lectures with multimedia presentations		Final evaluation	
		Examination	
		Assessment methods	
		Written exam	
		The basic criteria for evaluation	
		Assessment criteria or examination requirements:	
		Obtaining 51% points on the final exam: giving correct answers to more than half of the questions; attendance of at least 85% of lectures	
Method of verifying required learning outcomes			
Required courses and introductory requirements			
A. Formal requirements			

none	
B. Prerequisites	
none	
Aims of education	
<ul style="list-style-type: none"> • 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	
<p>Lecture content:</p> <p>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.</p>	
Bibliography of literature	
<p>A. Literatura wymagana do ostatecznego zaliczenia zajęć (zdania egzaminu):</p> <p>Begon M., Towsend CR., Harper JL. 2006. Ecology: from individuals to Ecosystems. 4. Ed. Blackwell.</p> <p>Cain ML., Bowman WD., Hacker SD. 2008. Ecology. Sinauer. Sunderland.</p> <p>Krebs CJ. 2013. Ecology: The Experimental Analysis of Distribution and Abundance. Pearson.</p> <p>Singer F. D. 2016. Ecology in Action. Cambridge Univ. Press. Cambridge</p> <p>Townsend C.R., Begon M., Harper J.L. 2003. Essential of ecology. Blackwell</p> <p>B. Literatura uzupełniająca</p> <p>Begon, M., Mortimer, M. and Thompson, D.J. (1996) Population ecology A unified study of animals and plants. Blackwell Science, Oxford.</p> <p>Nowak S., Mysłajek R.W., Szewczyk M., Tomczak P., Jędrzejewska B. (2017) Sedentary but not dispersing wolves <i>Canis lupus</i> recolonising Western Poland (2001-2016) conform to the predictions of Habitat Suitability Model. <i>Diversity and Distributions</i> 23:1231–1364.</p> <p>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. <i>Science</i> 352 (6287): 819-821; doi: 10.1126/science.aad6351</p>	
The learning outcomes (for the field of study and specialization)	Knowledge
	Skills
	Social competence
	<ul style="list-style-type: none"> - 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
	<ul style="list-style-type: none"> - interprets results and concludes on ecological phenomena, like vertebrate species/population abundance and distribution, as well as inter- and intraspecific interactions
	<ul style="list-style-type: none"> - systematically updates biological and ecological knowledge and information about its practical applications in nature conservation
Contact	
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