

Wykład II - Science of Biodiversity Conservation - opis przedmiotu

Informacje ogólne	
Nazwa przedmiotu	Wykład II - Science of Biodiversity Conservation
Kod przedmiotu	13.9-WB-BiolT-PBC-W-S14_pNadGenSTEIJ
Wydział	Wydział Nauk Biologicznych
Kierunek	Biologia
Profil	ogólnoakademicki
Rodzaj studiów	doktoranckie
Semestr rozpoczęcia	semestr zimowy 2016/2017

Informacje o przedmiocie	
Semestr	1
Liczba punktów ECTS do zdobycia	4
Typ przedmiotu	obowiązkowy
Język nauczania	angielski
Sylabus opracował	dr hab. Joerg Boehner, prof. UZ

Formy zajęć					
Forma zajęć	Liczba godzin w semestrze (stacjonarne)	Liczba godzin w tygodniu (stacjonarne)	Liczba godzin w semestrze (niestacjonarne)	Liczba godzin w tygodniu (niestacjonarne)	Forma zaliczenia
Wykład	30	2	-	-	Egzamin

Cel przedmiotu

Students should develop a sound understanding of the biological and ecological principles of nature protection; threats to species and ecosystems; populations as the main unit in conservation; theoretical and practical instruments for biodiversity protection. They should develop a good understanding of all important terms of nature protection in English, and should be able to read and understand respective literature in English. They should be able to understand practical problems of nature and to develop proposals to solve them.

Wymagania wstępne

Basic knowledge of ecology, as taught in an introductory course.

Zakres tematyczny

Biodiversity (species, genes, ecosystems, species richness, spatial gradients, hotspots); justifications for nature/biodiversity protection (use values and ethical values); threats (habitat loss and degradation, habitat fragmentation, pollution, overexploitation, global climate change); categories of conservation status (IUCN system, red lists, criteria); extinction of species (definition, levels, extinction rates, rarity and extinction risk); populations (description, dynamics, metapopulations); problems of small populations (extinction risk, loss of genetic diversity, inbreeding, demographic and environmental stochasticity); population viability analysis (logics, computer simulations, deterministic and stochastic simulations, reliability, tool for management decisions); ex situ conservation (studbooks, zoos and botanical gardens, genetic management of captive populations, interaction between ex and in situ conservation); reintroduction (IUCN guidelines, necessary considerations, chances of success, follow-up monitoring); protection of areas (criteria for selection, shape and size, zoning, connecting protected areas, management plans and strategies, system of protected areas in Poland).

Metody kształcenia

Lecture, multimedia presentations, computer simulations.

Efekty uczenia się i metody weryfikacji osiągnięcia efektów uczenia się

Opis efektu	Symbole efektów	Metody weryfikacji	Forma zajęć
Understands the relation between biological sciences and other natural sciences.	K_W01	test	Wykład
Knows important unsolved questions in biological sciences, especially about subjects investigated on the doctoral level.	K_W03	test	Wykład
Can communicate on an advanced level about biological sciences in at least one foreign language (e.g. English).	K_W07	test	Wykład
Is able to use the own and one foreign language (e.g. English) on a level necessary to communicate with foreigners, to write articles, and to give presentations.	K_U02	test	Wykład
Is able to convey scientific knowledge (in form of lecture or essay) on a popular and elementary scientific level, in his own and one foreign language.	K_U07	test	Wykład
Has advanced knowledge about how to use and improve methods for analyzing data, especially for studies in biological sciences.	K_U04	test	Wykład

Opis efektu	Symbole efektów	Metody weryfikacji	Forma zajęć
Has a comprehensive understanding of physical facts with regard to biological sciences.	• K_K01	• test	• Wykład
Can effectively apply mathematical and statistical methods in biological sciences.	• K_K02	• test	• Wykład
Understands the need of creative and scientific work.	• K_K03	• test	• Wykład

Warunki zaliczenia

Written test (multiple choice questions) at the end of the course, about the lecture's subjects. Grades depend on the percent of correctly answered questions: 50-59% = 3.0, 60-69% = 3.5, 70-79% = 4.0, 80-89% = 4.5, 90% or more = 5.0.

Literatura podstawowa

1. Primack, R.B. (2010): Essentials of Conservation Biology (5th edition). Sinauer Associates.
2. Van Dyke, F. (2008): Conservation Biology (2nd edition). Springer.
3. Sutherland, W.J. & D.A. Hill (2009): Managing Habitats for Conservation (10th edition). Cambridge University Press.
4. Pullin, A. S. (2012): Biologiczne Podstawy Ochrony Przyrody. PWN.

Literatura uzupełniająca

Selected articles from scientific journals.

Uwagi

Zmodyfikowane przez dr Katarzyna Dancewicz (ostatnia modyfikacja: 14-09-2016 12:16)

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