

PW11a - Ecology of cities - opis przedmiotu

Informacje ogólne	
Nazwa przedmiotu	PW11a - Ecology of cities
Kod przedmiotu	13.9-WB-Biol2P-Ecol.cities-S16
Wydział	Wydział Nauk Biologicznych
Kierunek	Biologia
Profil	ogólnoakademicki
Rodzaj studiów	pierwszego stopnia z tyt. licencjata
Semestr rozpoczęcia	semestr zimowy 2017/2018

Informacje o przedmiocie	
Semestr	5
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	15	1	9	0,6	Zaliczenie na ocenę
Ćwiczenia	15	1	9	0,6	Zaliczenie na ocenę

Cel przedmiotu

Students should understand the basic components (abiotic, biotic) and processes of urban ecosystems; adaptations of organisms (especially animals) to urban environments; the special role of humans dominating urban environments and communities of organisms; the role of cities in preserving biodiversity. They should develop a good understanding of the most important terms of urban ecology in English. Students will gain the ability to analyze English literature on urban ecology; develop a detailed research proposal concerning one self-chosen aspect of urban ecology, especially fauna; conduct field work and sample data in an urban environment, by using a variety of methods (survey of organisms, behavioural observations, questionnaires); discuss own research results in the context of the current knowledge about urban ecosystems and the role of humans. Students should be able to work in groups; exchange effectively ideas and own research results with other groups; present project work in front of class.

Wymagania wstępne

Basic knowledge of ecology (as taught in an introductory course)

Zakres tematyczny

Abiotic conditions of cities (radiation, rainfall), main urban ecosystems, ecological structure of cities (concentric model), history of adaptation of animals to urban environments, parasites and pest species, separation of habitats, threats (road kills), urban gradient and species richness, bird communities, space for reproduction, degree of urbanization, interaction between humans and animals.

Metody kształcenia

Lecture, multimedia presentations, practical field work, seminar work (literature)

Efekty uczenia się i metody weryfikacji osiągnięcia efektów uczenia się

Opis efektu	Symbole efektów	Metody weryfikacji	Forma zajęć
The student is able to present results of own work and other sources in front of class	K1A_U36	projekt	Ćwiczenia
The student has a good understanding of structure and function of urban ecosystems, adaptation of organisms (especially fauna) to the urban environment, role of humans in urban ecosystems, and role of cities for the protection of biodiversity	K1A_W24	projekt	Ćwiczenia
The student is able to use course-relevant terminology in English	K1A_W34	projekt	Ćwiczenia
The student is able to independently plan and conduct a project focussing on aspects of urban ecology as well as critically analyse the results	K1A_U17	projekt	Ćwiczenia
The student is able to work in groups	K1A_K01	projekt	Ćwiczenia

Warunki zaliczenia

Participation in project group work and final presentation of project results. Grades depend on quality of group work and presentations: 5.0 - excellent work and presentation,

meets highest standard; 4.0 - good work and presentation, minor flaws; 3.0 - acceptable work and presentation, must be improved in several important aspects; 2.0 - not acceptable.

Literatura podstawowa

1. Endlicher, W., Hostert, P., Kowarik, I., Kulke, E., Lossau, J., Marzluff, J., van der Meer, E., Mieg, H., Nützmann, G., Schulz, M., Wessolek, G. (eds.) (2011): Perspectives in Urban Ecology. Springer.
2. Botkin, D.B. & E.A. Keller (2010): Environmental Science. Wiley.
3. Townsend, C.R., Begon, M. & J.L. Harper (2008): Essentials of Ecology. Blackwell.

Literatura uzupełniająca

Articles from scientific journals, presented at the beginning of the course

Uwagi

Zmodyfikowane przez dr hab. Joerg Boehner, prof. UZ (ostatnia modyfikacja: 03-05-2017 10:02)

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