KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI

Projekt współfinansowany przez Unię Europejską w ramach Europejskiego Funduszu Społecznego

UNIA EUROPEJSKA
EUROPEJSKI FUNDUSZ SPOŁECZNY

Nazwa przedmiotu	Kod ECTS
The impact of climate change on living organisms	13.1.1564

Nazwa jednostki prowadzącej przedmiot

Pracownia Ekologii i Etologii Kręgowców

Studia

wydział	kierunek		
Wydział Biologii	Biologia	poziom	drugiego stopnia
		forma	stacjonarne
		moduł specjalnościowy	wszystkie
		specjalizacja	wszystkie

Nazwisko osoby prowadzącej (osób prowadzących)

prof. dr hab. Dariusz Jakubas

Formy zajęć, sposób ich realizacji i przypisana im liczba godzin

Formy zajęć

Wykład

Sposób realizacji zajęć

zajęcia w sali dydaktycznej

Liczba godzin

Wykład: 15 godz.

Liczba punktów ECTS

2
Estimation of working time:
Attending class - 15 hrs.
Written assessment - 1 hour.
Consultations - 9 hrs.
Independent work (preparing a multimedia presentation) - 15 hours.
Preparing to the written assessment - 10 hours.
TOTAL: 50 hrs

Termin realizacji przedmiotu

2021/2022 zimowy

Status przedmiotu

fakultatywny (do wyboru)

Język wykładowy

angielski

Metody dydaktyczne

Lecture with a multimedia presentation. Students' talks with multimedia presentation preceded by own work and consultations with the lecturer. Discussion.

Forma i sposób zaliczenia oraz podstawowe kryteria oceny lub wymagania egzaminacyjne

Sposób zaliczenia

Zaliczenie na ocenę

Formy zaliczenia

Written credit, paper.
Determining the final grade on the basis of the partial grades of the written exam and the paper.

Podstawowe kryteria oceny

Prerequisites for passing the course: - written assessment of the lecture part - quality of the prepared multimedia presentation - attendance at classes: - a student is obliged to attend classes, and in case of absence it should be excused in accordance with §11 of the UG Study Regulations - the condition to pass a lecture is attendance at at least 80% of classes - a student is obliged to compensate for the lack of knowledge and skills caused by absence in class in a manner and time indicated by the instructor

Sposób weryfikacji założonych efektów uczenia się

Expected leasrnig outcome will be verified by oral presentation, discussion, written assessment

Określenie przedmiotów wprowadzających wraz z wymogami wstępnymi

A. Wymagania formalne

none

B. Wymagania wstępne

knowledge of the English language sufficient to allow easy reading of scientific texts

Cele kształcenia

Understanding the direct and indirect effects of climate change on organisms. Knowledge of the environmental risks of climate change. To expand the knowledge of specialized scientific literature, and language used in scientific works. To acquire the ability to analyse review or experimental papers written in English and to improve presentation and discussion skills

Treści programowe

Climate as an environmental change agent; direct and indirect effects of climate change on different groups of organisms, effects of climate change on biodiversity; effects of climate change on the physiology of organisms; environmental changes in different habitats; consequences of sea level change; match-mismatch concepts; groups of organisms most vulnerable to climate change; scenarios for further climate change

Wykaz literatury

A. Literatura wymagana do ostatecznego zaliczenia zajęć (zdania egzaminu): A.1. wykorzystywana podczas zajęć Pearce-Higgins, J. W., & Green, R. E. (2014). Birds and climate change: impacts and conservation responses. Cambridge University Press Simpkins, M., Kovacs, K. M., Laidre, K., & Lowry, L. (2009). A framework for monitoring arctic marine mammals. https://www.ncdc.noaa.gov/sotc/ - The State of the Climate is a collection of monthly summaries recapping climate-related occurrences on both a global and national scale. https://climate.nasa.gov/ - Global Climat Change http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml - The Intergovernmental Panel on Climate Change https://www.carbonbrief.org/category/science - Carbon Brief is a UK-based website covering the latest developments in climate science, climate policy and energy policy. https://www.nceas.ucsb.edu/science/climate# - Researchers at NCEAS have produced a groundbreaking body of research exploring the effects of climate change on organisms and their environment. http://naukaoklimacie.pl/ - Popularno-naukowy portal. A.2. studiowana samodzielnie przez studenta Pearce-Higgins, J. W., & Green, R. E. (2014). Birds and climate change: impacts and conservation responses. Cambridge University Press Simpkins, M., Kovacs, K. M., Laidre, K., & Lowry, L. (2009). A framework for monitoring arctic marine mammals. 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 https://www.ncdc.noaa.gov/sotc/ - The State of the Climate is a collection of monthly summaries recapping climate-related occurrences on both a global and national scale. https://climate.nasa.gov/ - Global Climat Change http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml - The Intergovernmental Panel on Climate Change https://www.carbonbrief.org/category/science - Carbon Brief is a UK-based website covering the latest developments in climate science, climate policy and energy policy. https://www.nceas.ucsb.edu/science/climate# - Researchers at NCEAS have produced a groundbreaking body of research exploring the effects of climate change on organisms and their environment. http://naukaoklimacie.pl/ - Popularno-naukowy portal. B. Literatura uzupełniająca Piśmiennictwo dobierane do tematów poszczególnych zajęć, stosownie do problematyki planowanych prezentacji

Kierunkowe efekty uczenia się

The course realizes the following effects: - universal and area-specific effects (PRK): P7U_W, P7S_WG, P7S_UW, P7U_U, P7S_UK, P7S_KK - specific for the study biology: B2_W01, B2_W02, B2_W03, B2_W04, B2_W05, B2_W08, B2_U02, B2_U03, B2_U07, B2_U08, B2_U10, B2_K05, B2_K07

Wiedza

- Knows and understands to a deeper and more comprehensive degree natural phenomena and processes at different levels of complexity (B2_W01)
- Knows and understands the principle of strict, empirically based interpretation of biological phenomena and processes in research work and practical activities (B2_W02)
- Knows and understands research problems at the frontiers of the biological sciences that require the use of advanced tools (B2_W03)
- Possesses in-depth knowledge of the chosen specialty of biological sciences (B2_W04)
- Recognizes the dynamic development of the biological sciences and new research directions and disciplines (B2_W05)
- Knows the variety of contemporary experimental approaches and techniques

Umiejętności

- Can use the scientific literature of the biological speciality studied in an efficient manner (B2_U02) - Is able to critically analyze and select biological information, especially from electronic sources (B2_U03)
- Is able to critically confront biological information from a variety of sources and draw sound conclusions based on that information (B2_U07) - Is able to present research work in the field of the chosen speciality of biological sciences using the means of verbal communication and multimedia (B2_U08) - Can prepare oral presentations in Polish and foreign language concerning specific issues in the field of selected specialization (B2_U10)

Kompetencje społeczne (postawy)

- Is prepared to use credible sources of scientific and popular information in the biological sciences to expand knowledge (B2_K05)
- Is prepared to update systematically biological knowledge and its practical applications (B2_K07)

Kontakt

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