KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI

Projekt współfinansowany przez Unię Europejską w ramach Europejskiego Funduszu Społecznego

UNIA EUROPEJSKA
EUROPEJSKI
FUNDUSZ SPOŁECZNY

PROJEKT

Course title	ECTS code
Global climate change- Impact and adaptation	not defined

Name of unit administrating study

Faculty of Oceanography and Geography

Studies

faculty	field of study		
Faculty of Oceanography and Geography	Geography, Spatial Management, Water Management and Protection of Water Resources, Geology, Socio-economic geography with elements of GIS, Physical geography and geoinformation, Oceanography	type	all
		form	all
		specialty	all
		specialization	all

Teaching staff

dr Janusz Filipiak

Forms of classes, the realization and number of hours

Forms of classes

Wykład (to translate)

The realization of activities

lectures in the classroom

Number of hours

Wykład (to translate): 15 hours

ECTS credits

2
Lectures requiring the direct participation of the lecturer, ETCS credits – 1
Total number of hours: 20
•participation in the lecture – 15
•participation in the exam – 2
•consultation – 3
Student's work, ETCS credits – 1
Total number of hours: 20
•reading advised literature to follow the lecture's stream – 10
preparation to exam – 10

2021/2022 summer semester

Type of course

elective (to translate)

Language of instruction

english

Teaching methods

Wykład z prezentacją multimedialną (to translate)

Form and method of assessment and basic criteria for eveluation or examination requirements

Final evaluation

Egzamin (to translate)

Assessment methods

egzamin pisemny z pytaniami (zadaniami) otwartymi (to translate)

The basic criteria for evaluation

Achieving over 50% of the points of the final written exam - 90%
Activity during discussions - 10%

Sposób weryfikacji założonych efektów kształcenia (DO TŁUMACZENIA)

Required courses and introductory requirements

A. Formal requirements
None

B. Prerequisites

None

Aims of education

This course gives a knowledge on the impact of climate change, human interference with the climate system and fundamental methods of adaptation to and mitigation of climate change.

Course contents

1. Definition of: impact, adaptation, vulnerability, mitigation and sustainable development in the context of climate change.
2. What should we adapt to - adaptation, mitigation and related matters from the perspective of the United Nations Framework Convention on Climate Change (UNFCCC).
3. Present and predicted impacts and risks caused by a changing climate. Short review of climate change impact in selected natural systems and key economic sectors and services.
4. CO2 emissions budget and its possible development: scenarios of limiting global warming by cutting emissions. Selected aspects of geoengineering.
5. Key economic sectors and services: adaptation methods to climate change - case studies.

Bibliography of literature

Bibliography of literature
Alcamo J., Olesen J.E., 2012. Life in Europe Under Climate Change. Wiley-Blackwell, 290 pp.
Field C., Barros V., Mach K., Mastrandrea M. (eds.) 2014. The Fifth Assessment Report of the IPCC. Contribution of Working Group II: Impacts, Adaptation and Vulnerability. Technical Summary.
4°C Turn Down the Heat, 2012. A Report for the World Bank by the Potsdam Institute for Climate Impact Research and Climate Analytics.
Field C.B., Barros V., Stocker T.F., Qin D., Dokken D.J., Ebi K.L., Mastrandrea M.D., Mach K.J., Plattner G.-K., Allen S.K., Tignor M., Midgley P.M. (Eds.) 2012. Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. Cambridge University Press, 582 pp.
Meinshausen M., Smith S.J., Calvin K.V., Daniel J.S., Kainuma M., Lamarque J.-F., Matsumoto K., Montzka S.A., Raper S.C.B., Riahi K., Thomson A.M., Velders G.J.M., van Vuuren D., 2011. The RCP Greenhouse Gas Concentrations and their Extension from 1765 to 2300. Climatic Change (Special Issue).
Palutikof J., Boulter S.L., Ash A.J., Smith M.S., Parry M., Waschka M., Guitart D. (eds.) 2013., Climate Adaptation Futures. Wiley-Blackwell, 372 pp.
Pelling M., 2000. Adaptation to Climate Change: From Resilience to Transformation. Routledge, 224 pp.
Rogelj J., McCollum D.L., Reisinger A., Meinshausen M., Riahi K., 2013. Probabilistic cost estimates for climate change mitigation. Nature 493(7430): 79–83.
UNFCCC website materials: http://unfccc.int/

Oceanography BA - K_W02, K_W03 (P6U_W, P6S_WG), K_U05 (P6U_U, P6S_UW)
Oceanography MA - K_W02, K_W03 (P7U_W, P7S_WG), K_W05 (P7U_W, P7S_WK)
Geology BA - K_W07 (P6U_W, P6S_WG), K_U02 (P6U_U, P6S_UW)
Geography BA - K_W03 (P6U_W, P6S_WG), K_W05, K_W06 (P6U_W, P6S_WK), K_U03 (P6U_U, P6S_UW)
Physical Geography with Geoinformation MA - K_W02 (P6U_W, P6S_WG), K_W08 (P7U_W, P7S_WK), K_U05 (P6U_U, P6S_UK)
Water Management and Protection of Water Resources BA - K_W01, K_W02, K_W05 (P6U_W, P6S_WG), K_U03 (P6U_U, P6S_UK)
Spatial Management MA - K_W06 (P7U_W, P7S_WK), K_U05 (P7U_U, P7S_UW)

Knowledge

W1 - Student has the knowledge on the nature of climate change and human activity influencing the climate.
W2 - Student understands the consequences of climate change, the reasons of differences in vulnerability and exposure to impacts of climate change, the motivation to the mitigation and adaptation to climate change and the benefits of mitigation and adaptation to climate change.

Skills

U1 - Student can indicate the symptoms of impacts of climate change and the fundamental risks and opportunities for adaptation and mitigation of climate change.
Oceanography BA - K_U05
Oceanography MA - K_Uo1
Geology BA - K_U02
Geography BA - K_U03
Physical Geography with Geoinformation MA - K_U05
Water Management and Protection of Water Resources BA - K_U03
Spatial Management MA - K_U05

Social competence

K1 - Student is ready to cooperate in field of preservation of climate system.
Oceanography BA - K_K04 (P6U_K, P6S_KK)
Oceanography MA - K_K04 (P7U_K, P7S_KK)
Geology BA - K_K03 (P6U_K, P6S_KK)
Geography BA - K_K01 (P6U_K, P6S_KK)
Physical Geography with Geoinformation MA - K_K01 (P7U_K, P7S_KK)
Water Management and Protection of Water Resources BA - K_K04 (P6U_K, P6S_KK)

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	Spatial Management MA - K_K01 (P7U_K, P7S_KK)

Contact

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