


KAPITAŁ LUDZKI
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez
 Unię Europejską w ramach
 Europejskiego Funduszu
 Społecznego

UNIA EUROPEJSKA
 EUROPEJSKI
 FUNDUSZ SPOŁECZNY


Course title		ECTS code	
Atmospheric pollution in the coastal zone - case study		13.8.1166	
Name of unit administrating study			
null			
Studies			
faculty	field of study	type	first tier studies (BA)
Faculty of Oceanography and Geography	BRAK TŁUMACZENIA	form	full-time
		specialty	all
		specialization	all
Faculty of Oceanography and Geography	Physical geography and geoinformation	type	second tier studies (MA)
		form	full-time
		specialty	all
Faculty of Oceanography and Geography	Socio-economic geography with elements of GIS	specialization	all
		type	second tier studies (MA)
		form	full-time
Faculty of Oceanography and Geography	Geography	specialty	all
		specialization	all
		type	first tier studies (BA)
Faculty of Oceanography and Geography	Geology	form	full-time
		specialty	all
		specialization	all
Faculty of Oceanography and Geography	Spatial Management	type	first tier studies (BA), second tier studies (MA)
		form	full-time
		specialty	all
Faculty of Oceanography and Geography	Water Management and Protection of Water Resources	specialization	all
		type	first tier studies (BA)
		form	full-time
Faculty of Oceanography and Geography	BRAK TŁUMACZENIA	specialty	all
		specialization	all
		type	first tier studies (BA)
Faculty of Oceanography and Geography	Oceanography	form	full-time
		specialty	all
		specialization	all
Teaching staff			
prof. UG, dr hab. Anita Lewandowska			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		2 Contact hours: 25 Number of ECTS points: 1 - participation in the seminar: 15 - participation in the test: 5 - participation in consultations: 5 Student's own work Number of ECTS points: 1 Preparation for the test: 15 - studying literature: 5 Completing the final work: - presentation: 5	
The realization of activities			
classroom instruction, online classes			
Number of hours			
Tutorial: 15 hours			
The academic cycle			
2022/2023 summer 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				
<ul style="list-style-type: none"> - Working in groups with the use of internet sources aimed at answering the questions contained in the discussed case study. - discussion - group work - text analysis and discussion 		Final evaluation				
		Course credit				
		Assessment methods				
		<ul style="list-style-type: none"> - assignment work – project or presentation - Case study Mind map Brainstorm 				
		The basic criteria for evaluation				
		At the start, students are given 120 credit points During the course the student receives: plus 10 points for active participation plus 50 points for the final presentation plus 50 points for the completeness of data and substantively properly executed presentation plus 30 points for conclusions minus 40 points for each absence minus 10 points for each debate in polish Passing requires 128 points However standard: each element must pass 51% (attendance, presentation, conclusions)				
Method of verifying required learning outcomes						
zakładany efekt kształcenia	Wykład konwersatoryjny	Wykład problemowy	Praca w grupach	Diskusja	Wykład z prezentacją multimedialną	Analiza tekstów z dyskusją
	Wiedza					
K_W01	project/presentation					
K_W06	project/presentation					
	Umiejętności					
K_U08	project/presentation					
K_U09	project/presentation					
	Kompetencje					
K_K01						
Required courses and introductory requirements						
A. Formal requirements						
English						
B. Prerequisites						
None						
Aims of education						
Improving the ability to acquire, analyze available data and interpret them based on the latest scientific reports. Developing the ability to express opinions on scientific topics, supported by argumentation.						
Course contents						
The course will explore the recent literature highlighting various aspects of atmospheric pollution in the coastal zones e.g.: - causes of air pollution on a local, regional and global scale, - influence of outdoor and indoor air pollutions on people health and their quality of life in different urbanized coastal sea regions, - health situation in urbanized coastal zones of different parts of EU, - EU law legislations and regulations, - possible ways to prevent air pollution A key objective of this course is to use case study to practice how to critically evaluate and synthesize internet and published data, and to construct logical, succinct arguments based on analyses. Upon completion of this course, students will be better able to analyze scientific investigations and						

their results, read and interpret a variety of graphs, diagrams, and pictures from scientific publications as well as separate facts from rhetoric opinion presented in the internet. Students will practice the ability to function efficiently in multidisciplinary teams and to communicate scientific information effectively (orally or/and in writing).

Bibliography of literature

1. Publications from scientific journals (e.g. Atmospheric Chemistry and Physics, Science of the Total Environment, Atmospheric Research, Atmospheric Environment, Environmental Pollution, Climatic Change, Maritime Engineering and Ports, Air Quality Atmosphere and Health etc.) provided by the lecturer
2. EU legal acts
3. EU air quality reports
4. Useful links:
 - <http://www.efanet.org/> (The European Federation of Allergy and Airways Diseases Patients' Associations (EFA))
 - www.eea.europa.eu (European Environment Agency)
 - www.atlas.pzh.gov.pl (PZH-Państwowy Zakład Higieny)
 - <http://ec.europa.eu/environment/archives/cape/general/keydocs.htm> (CAFE)
 - www.helcom.fi
 - <http://klimat.imgw.pl/wp-content/uploads/2010/09/zad.2.r2009web.pdf>
 - www.gios.gov.pl (Państwowy Monitoring Środowiska)
 - <http://www.unece.org/env/lrtap/welcome.html>
 - <http://www.eoearth.org/view/article/51cbee387896bb431f6963ac/?topic=51cbfc78f702fc> (Indoor air pollution)
 - <http://armaag.gda.pl/>
 - <https://www.gdansk.wios.gov.pl>
 - <http://db-airmontech.jrc.ec.europa.eu/index.aspx>
 - <http://www.airparif.fr/#>
 - <http://www.port.gdynia.pl>
 - <http://www.marinetraffic.com>
 - <http://airpomerania.pl>
 - <http://gdansk.naszemiasto.pl/artykul/gdansk-w-oparach-smogu-zdjecia-przekroczone-normy,4016766,artgal,t,id,tm.html>
 - <http://misja-emisja.pl/baza-wiedzy/>
 - <http://waznamisjazardrowaemisja.pl>
 - <https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/19930073077.pdf>
 - https://i.kinja-img.com/gawker-media/image/upload/s--l2pToyAT-/c_scale,fl_progressive,q_80,w_800/kp8wtcd5sygg4xosdqyk.jpg
 - https://www.epa.gov/sites/production/files/2014-08/documents/sec_7.pdf

The learning outcomes (for the field of study and specialization)

P7U_W: P7S_WG - K_W01, K_W06
P7U_U: P7S_UK - K_U08, K_U09
P7U_K: P7S_KR - K_K01

Knowledge

K_W01 student knows and understands to a greater extent specialized terminology in relation to air pollution in the coastal zone of the sea (in English)
K_W06 student knows and identifies potential threats to human health and the environment occurring from a local to a global scale resulting from air pollution, predicts their effects at various time and spatial scales

Skills

K_U08 Students proficiently communicate in English, including the use of professional terminology
K_U09 Students can synthesize and analyze their own opinions and those of other authors

Social competence

K_K01 Students can work and cooperate in a team by actively assuming different roles, including the role of a leader

Contact

anita.lewandowska@ug.edu.pl