



<b>Course title</b> <b>Contemporary Challenges of Human Geography</b>			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	<b>Specialization</b>
Geography	BA, MA	Full-time	all
<b>Teaching staff:</b> prof. UG, dr hab. Mariusz Czepczyński			
Lecture: 15 hours		<b>ECTS credits: 2</b>	
<b>Aims of education</b> To know basic trends and inclinations in contemporary human geography To know current methods in qualitative and quantitative geographical studies To understand basic relations between space and humans in multiple contexts To become familiar with major challenges of geographical differentiations, interpretations and discourses			
<b>Course contents</b> <ul style="list-style-type: none"> <li>▪ Defining and re-defining human geography</li> <li>▪ Methodological approaches in contemporary human geography</li> <li>▪ Geography of globalisation and territorialisation</li> <li>▪ Geography of leisure and pleasure</li> <li>▪ Moral geographies and spatial justness</li> <li>▪ New urban geographies</li> <li>▪ Relational geography</li> <li>▪ Geography of happiness</li> <li>▪ Geographical discourses of identities</li> <li>▪ Geography of imagination</li> </ul>			

<b>Course title</b> <b>Cultural landscape</b>			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	<b>Specialization</b>
Geography	BA, MA	Full-time	all
<b>Teaching staff:</b> prof. UG, dr hab. Mariusz Czepczyński			
Lecture: 15 hours Students case study projects: 15 hours		<b>ECTS credits: 2</b>	
<b>Aims of education</b> To know basic trends and inclinations in contemporary human geography To know current methods in qualitative and quantitative geographical studies To understand basic relations between space and humans in multiple contexts To become familiar with major challenges of geographical differentiations, interpretations and discourses			
<b>Course contents</b> <ul style="list-style-type: none"> <li>▪ Defining landscapes</li> <li>▪ Landscape studies in geography</li> <li>▪ Culture and landscape</li> <li>▪ Theories of representations</li> <li>▪ Landscapes as text and icons</li> <li>▪ Everyday experiences of landscapes</li> </ul>			



- Landscapes and identities
- Media and landscapes
- Power and sacrum in landscape
- Heritage and memory
- Temporality of landscapes

<b>Course title</b>			
<b>Geography of places</b>			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	<b>Specialization</b>
Geography	BA, MA	Full-time	all
<b>Teaching staff:</b> prof. UG, dr hab. Mariusz Czepczyński			
Lecture: 15 hours		<b>ECTS credits: 2</b>	
<b>Aims of education</b>			
To know basic concepts and theories of historic and contemporary place study			
To know cultural-spatial research and place interpretation methodologies			
To understand the cultural relativities of places and their interpretations			
To be able to analyse place in its multiple and discursive contexts			
<b>Course contents</b>			
<ul style="list-style-type: none"> <li>▪ Place and space discourse,</li> <li>▪ Ontology of place</li> <li>▪ Sense of place;</li> <li>▪ Placelessness</li> <li>▪ Place and behaviour</li> <li>▪ Topophilia and spirit of place</li> <li>▪ Placemaking and imagined places</li> <li>▪ Places of histories and memories</li> <li>▪ Place and identity;</li> <li>▪ Politics of places</li> </ul>			

<b>Course title</b>			
<b>Global climate change - Impact and adaptation</b>			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	<b>Specialization</b>
Geography, Oceanography, Geology, Water management	BA, MA	Full-time	all
<b>Teaching staff:</b> dr Janusz Filipiak			
Lecture: 15 hours		<b>ECTS credits: 2</b>	



### Aims of education

To reach 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

Definition of: impact, adaptation, vulnerability, mitigation and sustainable development in the context of climate change. Assessment of observed changes and responses and interactions between ecosystems and human activities in selected natural and managed systems: Oceans, Coastal systems, Freshwater resources, Terrestrial systems. Human settlements, industry and infrastructure: urban and rural processes and planning. Key economic sectors and services: transportation, energy, agriculture and food production, water, tourism and recreation, insurance. Human health and its sensitivity to climate change. Adaptation needs and options, planning and implementation. Institutional and financial arrangements: UN system, public sector, private sector. Selected regional and national case studies and strategies – National Adaptation Plans and National Adaptation and Mitigation Actions.

### Course title

#### Global climate change – Physics of the process

### Studies

Field of study	Type	Form	Specialization
Geography, Oceanography, Geology, Water management	BA, MA	Full-time	all

**Teaching staff:** prof. dr hab. Mirosław Miętus

Lecture: 15 hours

**ECTS credits: 2**

### Aims of education

To reach a knowledge on the role of different factors in forming the climate of the Earth, to understand impact of natural processes in changing the climate and to learn what can be the impact of human activity on climate system.

### Course contents

Earth's climate system  
Internal and external climate drivers  
Natural greenhouse effect and the role of particular components of atmosphere  
Climate variability and change and the methods of detection  
Reasons of climate change  
Concept of radiative forcing (RF) and global potential warming (GPW)  
Observed contemporary climate change in particular climate sub-systems (atmosphere/land/sea/cryosphere)  
Observed contemporary climate change in global scale  
Observed contemporary climate change in regional scale  
Attribution of observed changes



<b>Course title</b> <b>Human Biometeorology</b>			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	<b>Specialization</b>
Geography	BA, MA	Full-time	all
<b>Teaching staff:</b> dr Małgorzata Owczarek			
Lecture: 15 hours		<b>ECTS credits: 2</b>	
<b>Aims of education</b>			
<ul style="list-style-type: none"> <li>- to explain basic terms related with meteorology relevant to human organism</li> <li>- to describe terms related with health effects of meteorological patterns</li> <li>- to explain the principles of heat exchange between human organism and environment</li> <li>- to collect and clarify various methods of assessment of biometeorological conditions</li> <li>- to be aware of hazards related to weather, climate and climate change</li> </ul>			
<b>Course contents</b>			
<ul style="list-style-type: none"> <li>- place of biometeorology among the other sciences</li> <li>- some examples of sources of information relating to biometeorology</li> <li>- health effects of different patterns: solar radiation, air pressure, air movement, noise, air pollution, pollen</li> <li>- the heat exchange between the human body and the thermal environment</li> <li>- selected models of human heat exchange, application of the MENEX model</li> <li>- calculating and application of selected basic biometeorological indices (such as Hill's cooling power, Effective temperatures, Humidex, <i>WCI</i>, <i>WBGT</i>)</li> <li>- calculating and application of selected bio-thermal indices (such as: <i>PMV</i>, <i>PET</i>, <i>PhS</i>, <i>PST</i>, <i>HSI</i>, <i>UTCI</i>)</li> <li>- direct and indirect health effects of weather and climate patterns</li> <li>- the health effects of severe weather events (such as: heat waves, frosts, heavy rainfall)</li> <li>- the impact of climate change impact on human life</li> </ul>			

<b>Course title</b> <b>New Cultural Geography</b>			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	<b>Specialization</b>
Geography	BA, MA	Full-time studies	
<b>Teaching staff:</b> prof. UG, dr hab. Mariusz Czepczyński			
Lecture: 15 hours		<b>ECTS credits: 2</b>	
<b>Aims of education</b>			
<p>To know basic concepts and theories of contemporary cultural geography</p> <p>To know cultural-spatial research and interpretation methods</p> <p>To understand basic relations between space and culture in multiple contexts</p> <p>To become familiar with cultural geographical problems and discourses</p> <p>To understand the cultural relativities of space and its interpretations</p>			
<b>Course contents</b>			
<ul style="list-style-type: none"> <li>▪ Defining and re-defining culture: from ethnography to cultural studies</li> <li>▪ Methodologies and schools in cultural geographies</li> <li>▪ Cultural turn – towards 'new' cultural geography</li> </ul>			



- Theories and approaches in contemporary cultural geographies
- Space and sense of place
- Cultural landscape - meaning of space and spatial semiotics
- Spatial representations and visual cultures
- Ideologies and cultural policies of space
- Identities and heritages
- Time-space in space and time
- Gender and age in space and place
- Media, market and multiplied places
- Clash of cultures / clash of geographies

<b>Course title</b>			
<b>Political geography</b>			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	<b>Specialization</b>
Geography	All	All	All
<b>Teaching staff:</b> prof.UG, dr hab. Jan A. Wendt; prof. visit. dr Alexandru Ilieș			
Lecture:15 hours Practical classes: 15 hours		<b>ECTS credits: 3</b>	
<b>Aims of education</b>			
To reach a knowledge on the role of different factors in forming modern state, border and political and geographical relation in modern world. Understanding of influence social, economical and environmental factors in policy of modern multicultural society. To reach a knowledge on trans-border and euro-regional cooperation. Understanding the increasing role of classical conflicts at politics and society. To reach a knowledge on the role of gender and geopolitics in modern world (focus on Eastern and Central Europe).			
<b>Course contents</b>			
A. Lecture:			
A. 1. Political geography, geopolitics and modern world.			
A. 2-3. The basic theories and concepts in political geography.			
A. 4-5. Theory and practice of electoral geography (case study: self governmental election, 2014 Poland).			
A. 6. Internal and external factors of politics.			
A. 7-8. Human rights, role and position of minorities (case study: Hungary, Poland, Slovakia and Romania).			
A. 9. Trans border and euro-regional cooperation (case study: Hungarian-Romanian border; Polish-Russian border).			
A. 10. Disparities and increasing role of feminism (case study: women position – chosen Islamic country).			
A. 11-12. Discrimination and gender in political geography (case study: work and education – Europe).			
A. 13. Classical conflicts (wars) of land and border XX -century (case study: Israel – Palestine; Bosnia and Herzegovina).			
A. 14. Area of influences (case study: Russia versus Ukraine, 2014).			
A. 15. The future of European Union: between regionalism and national state.			
B. Classes:			
B. 1-3. Practice of electoral geography – result of self-governmental election, Poland 2014. Changes according previous election, potential effects. Poland divided between parties or self-governmental society development. Question of representation and participation.			
B. 4-6. Geographic aspects of minorities at Central Europe. Role and importance of minorities. National and			



ethnic minorities. Geographical diversification of minorities. Question of Roma minority. Problems of education, political representation, bilingual administration and bilingual information.

B. 7-9. Question of women position and gender in modern world: education, disparities, position in policy, place in society. What is the meaning and the understanding of gender in Polish democratic society today. Gender and traditional society – Poland v. Germany, or Romania v. Spain. Women position in Latin-American and Arab countries.

B. 10-12. Conflicts in XXI century – factors, facts, results. Right to have an independent state (Tibet, Chechnya, Kosovo, Cataluña, Scotland, South Sudan). Geographic determinations of modern conflicts (e.g. Egypt, Libya, Tunisia, Syria, Iraq, Caliphate in Iraq and Syria, Kurdistan, Mali, Ukraine and Crimea, others – depends on students decision.

B. 13-15. European Union problems and challenges. Questions of: economy, labour market, innovation, energy policy, others – depend on students decision. Problems of enlargement: Turkey, West Balkans, North Africa (Morocco, Tunisia, East Europe – Moldova, Ukraine).

### Course title

### Pollution of lakes – A Paleoenvironmental Perspective

#### Studies

Field of study	Type	Form	Specialization
Geography, Geology, Oceanography	BA, MA	Full-time	all

**Teaching staff:** prof. UG, dr hab. Wojciech Tylmann

Lecture: 15 hours

**ECTS credits: 2**

#### Aims of education

The overall goals of this course are to: (1) provide students with an introduction to the concepts and techniques useful for studying the nature of past environmental change; (2) present the possibilities of using lake sediments to reconstruct pollution changes at different time scales; (3) highlight the role of interdisciplinary research in understanding environmental change in the past. The course has been designed to give opportunity for discussion on particular case studies.

#### Course contents

##### *Module 1: Sediments – a memory of lake ecosystems*

1. Introduction to the course (1 hour).
2. Lake sediments as environmental archives (2 hours).
3. Geochronological clock in lake sediments (2 hours).

##### *Module 2: Methods of reconstructions – a paleolimnological toolkit*

4. Environmental proxy data in sediments and their interpretation (2 hours).
5. Calibration of proxy data – toward quantitative reconstructions (2 hours).

##### *Module 3: Case studies – pollution-related problems investigated using paleolimnological approach*

6. Eutrophication – tracking the causes and symptoms of land-use change and over-fertilization (2 hours).
7. Acidification – inferring the consequences of industrial pollution and acidic precipitation (2 hours).
8. Heavy metals and persistent organic pollutants – history of environmental pollution (2 hours).



<b>Course title</b> <b>Renewable energy</b>			
<b>Studies</b>			
Field of study	Type	Form	Specialization
Geography, Spatial management Oceanography, Geology, Water management	BA, Ma	Full-time	all
<b>Teaching staff:</b> prof. dr hab. Mirosław Miętus, dr Mirosława Malinowska			
Lecture: 15 hours		<b>ECTS credits: 2</b>	
<b>Aims of education</b> To reach a knowledge on natural resources of climate and natural environment which might be use for energy production. And to learn what kind of limitations and well as benefits are connected with using energy from renewable resources. To learn what are the perspectives for renewable energy resources in Poland.			
<b>Course contents</b> Introduction – Why renewable energy resources are so important in contemporary world Solar energy Wind energy Hydropower and ocean energy Geothermal energy Bioenergy Renewable energy in the context of sustainable development (with special regard in Poland)			

<b>Course title</b> <b>Statistics in Physical Geography</b>			
<b>Studies</b>			
Field of study	Type	Form	Specialization
Geography, Oceanography, Spatial management, Water management,	BA, MA	Full-time	all
<b>Teaching staff:</b> dr Michał Marosz			
Lecture: 15 hours Class: 30 hours		<b>ECTS credits: 4</b>	
<b>Aims of education</b> The course participants shall acquire knowledge concerning: using basis statistical methods in physical geography, the choice of proper statistical methods depending on the data type, the ability of interpretation of statistical data and the results of statistical procedures. Also, they will gain the ability to use R programming in the solution of statistical problems.			



### Course contents

#### A. Lectures

- A.1. Statistical research – theoretical principles
- A.2. Presentation of outcomes
- A.3. Statistical series
- A.4. Analysis of the population structure
- A.5. Mean and dispersion measures (classical and quantile-based)
- A.6. Correlation analysis
- A.7. Regression models
- A.8. Time series analysis – trend, dynamics indices, seasonal variations

#### B. Classes

- B.1. Basic statistical measures, data presentation techniques
- B.2. Correlation and regression analysis
- B.3. Time series analysis
- B.4. Introduction to probability

### Course title

### Synoptic Climatology - applications

#### Studies

Field of study	Type	Form	Specialization
Geography, Oceanography, Water management	BA, MA	Full-time	all

**Teaching staff:** dr Michał Marosz

Lecture: 15 hours

Class: 15 hours

**ECTS credits: 3**

#### Aims of education

The course participants shall know the basics of atmospheric processes occurring in synoptic scale. Also, they shall acquire abilities in the Synoptic Climatology methodology – atmospheric circulation typologies and the means to investigate the relations between atmospheric circulation and environment characteristics. Acquiring basic skills in R programming and the utilisation of CPT (Climate Predictability Tool) software.

### Course contents

#### A. Lectures

- A.1 Synoptic climatology – theoretical background
- A.2 Atmosphere Dynamics – wind principles
- A.3 General circulation of the atmosphere, Air masses, Synoptic features of SLP field
- A.4 Mid-latitude cyclones development
- A.5 Classification techniques, examples of existing classifications (manual, hybrid)
- A.6 Case study of Synoptic Climatology application

#### B. Classes

- B.1 Geostrophic wind
- B.2 SLP features in synoptic scale, geostrophic flow
- B.3 Computer assisted classifications
- B.4 Investigation of the relations atmospheric circulation vs. environment – selected applications





<b>Course title</b> <b>Tourism at Central and Eastern Europe</b>			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	<b>Specialization</b>
Geography, Oceanography, Geology, Spatial management, Water management	BA, MA	Full-time	all
<b>Teaching staff:</b> prof.UG, dr hab. Jan A. Wendt; prof. visit. dr Alexandru Ilieș			
Lecture: 15 hours		<b>ECTS credits: 2</b>	
<b>Aims of education</b> Understanding the basic factors of tourism development. Developing skills to create plans for excursions. Major environmental and anthropogenic values of Central and Eastern Europe Regions. Indication of the impact of tourism on the environment and man.			
<b>Course contents</b> The basic theories and concepts in tourism geography Internal and external factors of developing tourism Natural and anthropogenic values in tourism geography Tourists infrastructure in Central and Eastern Europe Tourism geography of Central Europe (Poland, Hungary, Slovakia, Czech Republic) Tourism geography of Baltic countries Tourism geography of former Soviet Union countries (Belarus, Ukraine) Tourism geography of Romania, Moldova and Bulgaria Tourism geography of former Yugoslavian countries and Albania (EU members and non EU members) Tourism geography of Russia The impact of tourism on the environment, economy and society			