

## Disaster risk management Educational subject description sheet

### **Basic information**

Study programme Geohazards and Climate Change		Didactic cycle 2023/24	
Speciality -		Subject code 07GCCS.28P.02874.23	
Organizational unit Faculty of Geographical and Geological Sciences		Lecture languages English	
Study level Second-cycle programme		Course type Obligatory	
<b>Study form</b> Full-time		<b>Block</b> Basic subjects	
Education profile General academic			
Subject coordinator	Marta Kubacka	·	
Lecturer	Marta Kubacka		
<b>Period</b> Semester 4	Activities and hours <ul> <li>Lecture: 15, Exam</li> <li>Laboratories: 15, Graded cr</li> </ul>	redit	Number of ECTS points 4

#### Goals

Code	Goal
C1	To familiarize students with the framework of disaster risk management at local, regional, national and international scale: definitions and terminology.
C2	To familiarize students with the framework of disaster risk management (stages, rules and structures as well as authorities, centers, teams, staffs and groups).
С3	To familiarize students with the structure of functioning the municipal center of crisis management.
C4	To teach how to use modern tools in disaster risk management plan.
C5	To teach new GIS skills needed to solve the specific problem connected with disaster risk management.

## **Entry requirements**

Basic knowledge about geohazards and their impact on environment and human well-being. Basic knowledge about GIS analysis.

## Subject learning outcomes

Code	Outcomes in terms of	Learning outcomes	Examination methods
Knowledge	e - Student:		
W1	knows and understands the framework of disaster risk management: knows and understands the concept of disaster risk management: definitions and terminology;	GCC_K2_W01, GCC_K2_W07, GCC_K2_W08, GCC_K2_W09, GCC_K2_W15, GCC_K2_W17, GCC_K2_W18	Test, Report
W2	knows and understands the elements of disaster risk management framework.	GCC_K2_W01, GCC_K2_W07, GCC_K2_W08, GCC_K2_W09, GCC_K2_W15, GCC_K2_W17, GCC_K2_W18	Test, Report
Skills - Student:			
U1	identifies and implements new GIS skills needed to solve the specific problem connected with disaster risk management;	GCC_K2_U02, GCC_K2_U05, GCC_K2_U12, GCC_K2_U13	Test, Report
U2	prepares an initial draft of disaster risk management plan.	GCC_K2_U02, GCC_K2_U05, GCC_K2_U12, GCC_K2_U13	Test, Report
Social competences - Student:			
К1	is prepared to take action to propose solutions for disaster risk management at local, regional, national and international scales.	GCC_K2_K01, GCC_K2_K02, GCC_K2_K07	Test, Report

## Study content

No.	Course content	Subject learning outcomes	Activities
1.	Concept of disaster risk management: definitions, terminology and legal acts at local, regional, national and international scale.	W1, W2, U1, U2, K1	Lecture
2.	Elements of disaster risk managements framework at local, regional, national and international scale.	W1, W2, U1, U2, K1	Lecture
3.	Planning an institutional assessment of disaster risk management systems at local, regional, national and international scale.	W1, W2, U1, U2, K1	Lecture
4.	Workshops in the municipal center of crisis management.	W1, W2, U1, U2, K1	Lecture
5.	Analysing and interpreting the data connected with disaster risk mnagement: case studies.	W1, W2, U1, U2, K1	Laboratories
6.	Tools and methods for institutional disaster risk assessemnt: case studies.	W1, W2, U1, U2, K1	Laboratories

## Additional information

Activities	Teaching and learning methods and activities	
Lecture	Lecture with a multimedia presentation of selected issues, Conversation lecture, Problem- based lecture, Discussion, Workshop method	
Laboratories	Laboratory method	

Activities	Credit conditions
Lecture	The final grade consists in 100% of the grade obtained during the test. Grading scale: 1. very good (5.0) - from 90% of points, 2. good plus (4.5) - from 80% of points, 3. good (4.0) - from 70% of points, 4. sufficient plus (3.5) - from 60% of points, 5. satisfactory (3.0) - from 50% of points, 6. unsatisfactory (2.0) - below 50% of points.
Laboratories	<ul> <li>Active participation and preparation of partial works (reports).</li> <li>The final grade is the result obtained from the assessment of partial tasks (100% of the assessment).</li> <li>Grading scale: <ol> <li>very good (5.0) - from 90% of points - all partial works are at an advanced level and the student is very active during class.</li> <li>good plus (4.5) - from 80% of points - all partial works meet expectations for the target and the student is very active during class.</li> <li>good (4.0) - from 70% of points - all partial works meet expectations for the target and the student is enough active during class.</li> <li>sufficient plus (3.5) - from 60% of points - all partial works meet partial mastery of the target. The student demonstrates partial understanding or can perform portions of the target.</li> <li>satisfactory (3.0) - from 50% of points - all partial works meet partial mastery of the target.</li> </ol> </li> </ul>

#### Literature

#### Obligatory

- 1. Eslamian S., Eslamian F. (Eds.). 2022. Disaster Risk Reduction for Resilience. Disaster Risk Management Strategies. Springer Nature
- 2. Ranke U. 2016. Natural Disaster Risk Management: Geosciences and Social Responsibility. Springer Nature
- 3. Baas S., Ramasamy S., Dey De-Pryck J., Battista F. 2008. Disaster Risk Management System Analysis. Institutions for Disaster Risk Management. FAO Italy

#### Optional

1. articles in the field: disaster risk management

### **Calculation of ECTS points**

Activities	Activity hours*
Lecture	15
Laboratories	15
Reading the indicated literature	10
Preparation for classes	20
Preparation for the assessment	10
Preparation of a project	30
Student workload	Hours 100
Number of ECTS points	ECTS 4

\* academic hour = 45 minutes

# Efekty uczenia się dla kierunku

Kod	Treść
GCC_K2_K01	The graduate is ready to implement and popularize actions serving the environmental protection
GCC_K2_K02	The graduate is ready to identify the influence of environmental processes onto the socio-economic processes, and also influence of anthropogenic activities onto the various components of the natural environment in various timescales
GCC_K2_K07	The graduate is ready to undertake the cooperation within the crisis management teams and solve the conflicts
GCC_K2_U02	The graduate can critically assess future climate change scenarios and associated environmental changes and geohazards
GCC_K2_U05	The graduate can an extended degree use the scientific terminology and vocabulary, read the advanced scientific literature with understanding
GCC_K2_U12	The graduate can apply qualitative methods for solving the human-environment conflicts
GCC_K2_U13	The graduate can use in practice the environmental management principles leading to improvement of quality of life
GCC_K2_W01	The graduate knows and understands thoroughly, the processes operating in the natural environment, their causes, mechanisms, consequences and associated geohazards
GCC_K2_W07	The graduate knows and understands thoroughly complex socio-economic processes in the local, regional and global scale and their influence on the occurrence of extreme environmental events
GCC_K2_W08	The graduate knows and understands thoroughly, the influence of the climate change, extreme environmental events and geohazards on the socio-economic processes
GCC_K2_W09	The graduate knows and understands thoroughly, relationship between climate and environmental change and necessity of formulation of the adaptation strategies
GCC_K2_W15	The graduate knows and understands advanced vocabulary associated with climate change, natural environment and geohazards
GCC_K2_W17	The graduate knows and understands thoroughly, the literature in the field of climate change, geohazards as well as basic environmental and social research
GCC_K2_W18	The graduate knows and understands thoroughly, the most up to date trends in science and implementation of the newest scientific achievements in studies field