#### **COURSE INFORMATION SHEET**

University: Catholic University in Ružomberok

Faculty: Faculty of Education

**Course code:** KGE/Ge- Course title: Natural Hazards and Risks in the Landscape

BD106B/22

Type and range of planned learning activities and teaching methods:

Form of instruction: Seminar Recommended study range:

hours weekly: 1 hours per semester: 13

**Teaching method:** on-site

Credits: 2 Working load: 50 hours

**Recommended semester/trimester: 3**.

Level of study: I.

**Prerequisities:** 

# Requirements for passing the course:

Elaboration of a semester paper in the range of 5-10 pages thematically focused on natural hazards in the vicinity of the student's living place. Final assessment: total percentage gain from the evaluation of the content and level of the semester work (80%) and the presentation of the semester work (20%).

Subject evaluation: A - 100%-93%, B - 92%-85%, C - 84%-77%, D - 76%-69%, E - 68%-60%, Fx - 59%-0%

## **Learning outcomes of the course:**

After completing the subject, the student will acquire the following knowledge, skills and competences:

- has knowledge regarding real and potential natural hazards, especially in the landscape of Slovakia, but also in other parts of the world,
- is able to assess the vulnerability of a particular part of the environment and evaluate the human influence on its activation,
- identifies natural hazards in the regions of Slovakia,
- knows the possibilities of application solutions in case of specific natural hazards.

#### **Course contents:**

- 1. Natural hazards: introduction, basic questions
- 2. Landslides: classification, triggering factors
- 3. Landslides: options for solutions
- 4. Floods: classification, triggering factors, historical floods
- 5. Floods: options for solutions
- 6. Accelerated wind and biogenic erosion, options for solutions
- 7. Accelerated water erosion: classification, triggering factors, historical erosion
- 8. Accelerated water erosion: options for solutions
- 9 Avalanches
- 10. Wind calamities
- 11. Hazards of karst and mining areas
- 12. Earthquake and volcanism
- 13. Presentations of semester works

## **Recommended or required literature:**

LUKNIŠ, M. ED. (1972). Slovakia 2, Nature. Bratislava: Obzor, 917 p. In Slovak LAUKO, V. (2003). Physical geography of the Slovak Republic. Bratislava: Mapa Slovakia School, 106 p. In Slovak

ŠABO, M. (2010). Introduction to the issue of assessing natural threats. Acta Geographica Universitatis Comenianae, 54, 2, p. 193-205. In Slovak, available on the Internet: http://www.actageographica.sk/stiahnutie/54 2 03 Sabo.pdf

BELLA, P. (2008). Caves as natural geosystems – geoecological research and environmental protection. Liptovský Mikuláš: ŠOP SR, SSJ, 167 p. In Slovak

PAPČO, P. (2011). Gully erosion in time – maps versus correlated sediments (case study). Geographical journal, 63, 3, p. 287-298. In Slovak, available on the Internet: https://www.sav.sk/journals/uploads/03101341GC-11-3-Papco.pdf

PAPČO, P. (2015). Historical soil erosion research and environmental education. Studies Scientifica Facultatis Paedagogicae Universitas Catholica Ružomberok, 14, 4, p. 120-130, In Slovak

BOLTIŽIAR, M. (2009). The influence of georelief and morphodynamic processes on the spatial structure of the high mountain landscape of the Tatras. Nitra: Constantine the Philosopher University in Nitra, Institute of Landscape Ecology SAS, Nitra branch, 158 p. In Slovak, available on the Internet: www.kgrr.fpv.ukf.sk/

images/publications/Monografia\_Boltiziar

Tatras\_geomorfologia\_dialkovy\_prieskum\_Zeme\_GIS.pdf

ATLAS MAPS OF THE STABILITY OF SLOPES SR. Bratislava: Dionýz Štúr State Geological Institute. Available on the Internet: http://apl.geology.sk/atlassd

ATLAS OF THE LANDSCAPE OF THE SLOVAK REPUBLIC (2002). Bratislava: MŽP SR, Banská Bystrica: SAŽP, 343 p.

## Language of instruction:

Slovak

### **Notes:**

### **Course evaluation:**

Assessed students in total: 37

A	В	С	D	Е	FX
91.89	2.7	0.0	0.0	0.0	5.41

Name of lecturer(s): RNDr. Pavol Papčo, PhD.

Last modification: 03.11.2022

### **Supervisor(s):**

**Guarantor:** 

Administrátor Systému

People responsible for the delivery, development and quality of the study programme:

prof. ThDr. Rastislav Adamko, PhD., doc. Mgr. Marek Babic, PhD., doc. RNDr. Pavel Bella, PhD., prof. PaedDr. Mgr. art. Rastislav Biarinec, ArtD., prof. Irina Chelysheva, DrSc., prof. PaedDr. František Dlugoš, PhD., Mgr. Juraj Dvorský, PhD., prof. PhDr. Ingrid Emmerová, PhD., doc. Tatiana Korenkova, CSc., prof. PaedDr. Milan Ligoš, CSc., doc. Mgr. Eva Litavcová, PhD., doc. PaedDr. Peter Mačura, PhD., prof. PhDr. David Papajík, PhD., doc. Ing. Miroslav Saniga, CSc., prof. Nóra Séllei, PhD., DrSc., PhDr. ThLic. Martin Taraj, PhD., Prof. Ing. Peter Tomčík, PhD., prof. Dr. phil. fac. theol. Peter Volek, doc. Ing. Igor Černák, PhD.