COURSE INFORMATION SHEET

University: Catholic University in Ružomberok	
Faculty: Faculty of Education	
Course code: KGE/Ge-BD110A/22	**Course title:** Physical Geography 4 (Pedogeography and Biogeography)
Type and range of planned learning activities and teaching methods: **Form of instruction:** Lecture / Seminar **Recommended study range:** **hours weekly:** 2 / 1 **hours per semester:** 26 / 13 **Teaching method:** on-site	
Credits: 3	**Working load:** 75 hours
Recommended semester/trimester: 4.	
Level of study: I.	
Prerequisities: KGE/Ge-BD107A/22	

Requirements for passing the course:

During the semester, the student demonstrates his theoretical knowledge in the field of pedogeography and biogeography by drawing up profiles of soil types, checking their knowledge in the form of a written test and a knowledge test of selected plant species. Subsequently, he demonstrates practical skills in the field with the ability to identify selected soil species, soil types and plant species and communities in the country. Final assessment: total percentage gain from examinations during the semester (50%) and the exam in the form of a written test and an oral examination (50%).

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:

- understands soil as a separate natural creation created by the specific interaction of soil-forming factors,
- knows the physico-chemical properties of soil and its organic and inorganic components,
- has an overview of the soil textures and soil types of the Earth and Slovakia, has an overview of the zonal distribution of soils in the horizontal and vertical direction, or about azonal soils,
- masters the methodology of identifying selected soil textures and types in the landscape, as well as the methodology of the basic principles of soil protection against accelerated soil erosion,
- knows the rules of spatial differentiation of the biosphere, zonal distribution of biota on Earth and in Slovakia in horizontal and vertical directions, respectively. knows the conditions for the formation of azonal communities,
- understands the basic relationships and ties between flora, fauna and environmental factors, understands the terms as biotope, ecosystem,
- is able to identify selected plant species and communities in the landscape,
- knows the basic principles of nature and landscape protection, its system at the national and transnational level, knows how to incorporate environmental education as a cross-cutting topic within geographical education

Course contents:

1. Pedogeography: pedogeography as a geographical discipline vs. pedology, the development of the understanding of soil as a separate natural creation
2. Formation and development of soil (pedosphere), soil-forming factors, physico-chemical properties of soil, organic and inorganic components of soil
3. Soil textures, spatial distribution in Slovakia, determination of soil texture in the field
4. Soil types, detailed profile characteristics
5. Spatial distribution of soil types in Slovakia and on Earth, determination of soil type in the field
6. Horizontal and vertical zonation of soils, azonal soils
7. Accelerated soil erosion, soil fund protection
8. Biogeography: biogeography as a geographical discipline vs. biology, components of the biosphere
9. Vertical zonation of vegetation in Slovakia, potential natural vegetation, real vegetation
10. Principles of spatial distribution of fauna, flora and fauna of the world ocean
11. Horizontal zonation of biota on Earth (geobiomes)
12. Basic relationships and links between flora, fauna and environmental factors; biotope, ecosystem
13. Nature and landscape protection, national level (SR, Nature and Landscape Protection Act), transnational level (NATURA 2000, UNESCO Man and the Biosphere Programme, UNESCO World Natural Heritage, Ramsar sites)

Recommended or required literature:

MIČIAN, Ľ. (1972). Soils. In Lukniš, M. ed. (1972). Slovakia 2, Nature. Bratislava: Obzor, p. 361-402. In Slovak
KRNÁČOVÁ, Z., HREŠKO, J., ĎUGOVÁ, O. (2008). Basics of pedology for ecologists and environmentalists. Nitra: Faculty of Natural Sciences UKF in Nitra, 190 p. In Slovak
ČURLÍK, J., ŠURINA, B. (1998). Handbook of field survey and soil mapping. Bratislava: Soil Fertility Research Institute, 134 p. In Slovak
LAUKO, V. (2003). Physical geography of the Slovak Republic. Bratislava: Mapa Slovakia School, 106 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
PLESNÍK, P. (2004). General biogeography. Bratislava, Comenius University, 425 p. In Slovak
LUKNIŠ, M. ED. (1972). Slovakia 2, Nature. Bratislava: Obzor; chapters Flora (p. 403-628), Fauna (p. 629-816), Nature and environment protection (p. 817-842), In Slovak
LOŽEK, V. (2007). Mirror of the past: the Czech and Slovak landscape in the Quarter. Prague, Dokořán, 198 p. In Czech
PROTECTED NATURE AREAS OF THE SLOVAK REPUBLIC. Available on the Internet: www.sopsr.sk/web/?cl=114
STATE LIST OF SPECIALLY PROTECTED PARTS OF NATURE OF THE SLOVAK REPUBLIC. Available on the Internet: https://data.sopsr.sk/chranene-objekty
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: 36

A	B	C	D	E	FX
33.33	8.33	27.78	11.11	8.33	11.11

Name of lecturer(s): doc. RNDr. Pavel Bella, PhD., 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:

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