COURSE INFORMATION SHEET

University: Catholic University in Ružomberok	
Faculty: Faculty of Education	
Course code: KBE/Bi-BD108A/22	**Course title:** Introduction to Natural Environment
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: 4	**Working load:** 100 hours
Recommended semester/trimester: 4.	
Level of study: I.	
Prerequisities:	

Requirements for passing the course:

Verification of the acquisition of the relevant knowledge, skills and competences of the student is implemented on the basis of theoretical and practical reviews during the semester teaching of the subject. In the course of the semester, they will be two writing verifications, for each additional 10 points. During the semester, the student will develop a project or presentation, as well as the consideration of the selected theme with the issue of ecology, even for these 2 activities can get a maximum of 10 percentage points. The upcoming to participate in the final written or oral test is necessary to obtain from semestral check and presentation or project at least 20 percentage points. At the final written or oral exam, the student can get a maximum of 60 percentage points. The overall assessment will be based on the sum of the percentage points obtained from semestral verifications, consideration, semestral presentation or project and the result of a knowledge from the final written or oral exam.

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:

The aim of the course is to provide basic theoretical knowledge and practical skills for teaching in the framework of integral objects related to natural environment at primary and secondary schools.

Education results:

After completing the course, the student gains the following knowledge, skills and competences:

- student knows and understands theoretical knowledge of the essential components of the natural environment, ecological officials and conditions
- student acquires knowledge of the natural environment of Slovakia, main types of habitats, as well as its protection (nature and country protection law no. 543/2002 Coll .)
- student can apply biological disciplin methods- Student can use practical skills in working with devices, devices and material research in the laboratory and terrain
- student can implement acquired knowledge within the Education Process of Education

- student is able to cooperate on project solutions Aimed at the Factors of the Natural Environment

Course contents:

1. Basic components of the natural environment. The definition of a natural environment, basic component abiotic and biotic environments.
2. Ecological agents and conditions. Breakdown of ecological officials: abiotic, biotic anthropical.
3. Climate as a soil formation factor - rainfall, hydrolimits, water in soil, soil air and soil temperature.
4. Edafone and humus. Edafone classification, selected groups, abiotic factors and their effects of bodies the organisms, the importance of the edafone and the effect of human activity on edaphon. Humus - its importance and indicators of humus.
5. Edafic environment factors. Distribution of plants in relation to the grain size of the soil, according to the bedfootop.
6. Water and organisms. Water Balance of Plants, Plant Adaptation to Water Lack, Vegetable Ecotypes Following Adapting to Water and Moisture.
7. Air and its flow. The action of air for organisms from eco-perspective, plant adaptation against oxygen lack.
8. Biotope, biocenosis and ecosystem.
9. Population relations in biococenosis - intraspecific relations in populations (reproductive ane-producing relationships), interspecific relations of populations (neutral, positive and negative).
10. Trophic chains - detrite, herbivorous, parasitic.
11. Types of habitats from the territory of Slovakia - water surfaces, meadows, forests (high-rise steps and forestry degrees in Slovakia), rock environment, urban environment, basic abiotic abiotic characteristics of these habitats (plant and animal representatives)
12. Protecting the natural environment in Slovakia - degrees of nature protection, large-area protected territories (National Park and Protected Landscape Area) and small protected areas (National Nature Reserve, Nature Reserve, National Natural Monument, Natural Monument), Protected Natural Equipment (Nature and Landscape Protection Act no. 543/2002 Coll.)

Recommended or required literature:

Barna, M., Bublinec, E.: Základy všeobecnej ekológie. VERBUM – vydavateľstvo Katolíckej univerzity v Ružomberku, Ružomberok, 2016, 130 s. ISBN: 978-80-561-0351-7.
Bedrna, Z.: Environmentálne pôdoznalectvo. Veda, Bratislava, 2002, 352 s.
Bublinec, E., Machava, J., Demko, J., Macko, J.: Základy prírodného prostredia – Pedológia. VERBUM – vydavateľstvo Katolíckej univerzity v Ružomberku, Ružomberok, 2018, 192 s. ISBN: 978-80-561-0530-6.
Odum, E. P.: Základy ekologie. Academia, Praha, 1977, 733 s.
Reichwalder, P. , Jablonský, J.: Všeobecná geológia 1. Univerzita Komenského, Bratislava, 2003, 244 s.
Reichwalder, P. , Jablonský, J.: Všeobecná geológia 2. Univerzita Komenského, Bratislava, 2003, 507 s.
Saniga, M.: Ekologické úvahy. Liptovské Revúce: Miroslav SANIGA, 2007, 107 s. ISBN: 978-80-89253-16-6.
Saniga, M.: Podnikanie v súlade s prírodou. Dolná Tižina: Alfa a Omega, s. r. o., 2015, 50 s. ISBN: 978-80-971266-7-4.
Saniga, M.: Všetko „naj...“ o našich vtákoch. Perfekt, Bratislava, 2015, 271 s. ISBN: 978-80-8046-732-6.
Saniga, M.: Rok v prírode. Perfekt, Bratislava, 2016, 224 s. ISBN: 978-80-8046-774-6.
Saniga, M.: Naša príroda v kocke. Bratislava: Vydavateľstvo SAV, 2016, 181 s. ISBN: 978-80-224-1557-6.
Saniga, M.: Kresťan a ekológia. Bratislava: Don Bosco, 2018, 40 s. ISBN: 978-80-8074-394-9.
Townsend, C. R., Begon, M., Harper, J. L.: Základy ekologie. Univerzita Palackého v Olomouci, Olomouc 2010, 506 s.
Trizna, M.: Meteorológia, klimatológia a hydrológia pre geografov. Bratislava, Geo-grafika , 2007, 143 s.
Zákon o ochrane prírody a krajiny č. 543/2002 Z. z.

Language of instruction:

Notes:

Course evaluation:

Assessed students in total: 24

A	B	C	D	E	FX
41.67	29.17	16.67	12.5	0.0	0.0

Name of lecturer(s): doc. Ing. Miroslav Saniga, CSc.

Last modification: 23.08.2022

Supervisor(s):

Guarantor:

Administrátor Systému

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

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