

COURSE INFORMATION SHEET

University: Catholic University in Ružomberok	
Faculty: Faculty of Education	
Course code: KBE/Bi-MD106A/22	Course title: Ecology
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: 2.	
Level of study: II.	
Prerequisites:	
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, there will be two writing verifications, for each additional 10 percentage 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. To participate in the final written or oral test, it is necessary to obtain from semestral reviews and presentations or project as well as for at least 20 points. For the knowledge of 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 to ensure the teaching of ecology in primary and secondary schools. Education results: After completing the subject, the student acquires the following knowledge, skills and competences: - student has extensive knowledge of ecology - student can be applied to solving basic, applied and pedagogical research - student is able to organize themselves separately, lead and analyze the educational process in the subject of ecology with regard to Upgraded trends, as well as implemented in teaching the latest scientific knowledge in the area	

- student can organize and plan a work process is able to work in the team and can take decisions and carry responsibility

Course contents:

1. Environment, Conditions of Existence Organisms, Basic Ecological Laws.
2. Organisms, their relationships to basic ecological factors, organism adaptation.
3. Population.
4. Biocenosis.
5. Ecosystem as a basic ecological unit.
6. Sorting ecosystems.
7. Fabric Energy Flow.
8. Production of organic matter.
9. Biogeochemical cycles.
10. Climabioms.
11. Orobioms and forest vegetation tiers in Slovakia.
12. Man as an ecological factor.
13. Integral ecology.

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 pôdoznanectvo. 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 vtákochoch. 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.

Language of instruction:**Notes:****Course evaluation:**

Assessed students in total: 8

A	B	C	D	E	FX
37.5	37.5	25.0	0.0	0.0	0.0

Name of lecturer(s): doc. Ing. Miroslav Saniga, CSc., Ing. Jozef Macko, PhD.
Last modification: 23.08.2022
Supervisor(s): Guarantor: Administrátor Systému People responsible for the delivery, development and quality of the study programme: prof. ThDr. Rastislav Adamko, PhD., doc. RNDr. Pavel Bella, PhD., prof. PaedDr. Mgr. art. Rastislav Biarinec, ArtD., prof. Irina Chelysheva, DrSc., prof. PaedDr. František Dlugoš, PhD., prof. PhDr. Ingrid Emmerová, PhD., doc. Tatiana Korenkova, CSc., Prof. Dr. hab. Wojciech Józef Kunicki, prof. PaedDr. Milan Ligoš, CSc., doc. Mgr. Eva Litavcová, PhD., prof. PhDr. David Papajík, PhD., doc. Ing. Miroslav Saniga, CSc., prof. Nóra Séllei, PhD., DrSc., PhDr. ThLic. Martin Taraj, PhD., prof. Dr. phil. fac. theol. Peter Volek, prof. Mgr. Martin Zvonař, Ph.D., doc. Ing. Igor Černák, PhD.