

## COURSE INFORMATION SHEET

<b>University:</b> Catholic University in Ružomberok	
<b>Faculty:</b> Faculty of Education	
<b>Course code:</b> KBE/Bi-MD102A/22	<b>Course title:</b> Environmental Chemistry
<b>Type and range of planned learning activities and teaching methods:</b> <b>Form of instruction:</b> Seminar <b>Recommended study range:</b> <b>hours weekly:</b> 1 <b>hours per semester:</b> 13 <b>Teaching method:</b> on-site	
<b>Credits:</b> 1	<b>Working load:</b> 25 hours
<b>Recommended semester/trimester:</b> 1.	
<b>Level of study:</b> II.	
<b>Prerequisites:</b>	
<b>Requirements for passing the course:</b> Verification of the degree of acquisition of the relevant knowledge, skills and competencies of the student is carried out on the basis of theoretical and practical examinations during the semester teaching of the subject. During the semester, the student demonstrates his theoretical knowledge and practical skills in applied chemistry to the environment, while monitoring and analyzing selected indicators of environmental components. Continuous assessment during the semester: - The student demonstrates practical skills in monitoring selected components of the environment in the field and the laboratory can obtain max. 10 points. - The student prepares and presents a semester paper on a specific topic in accordance with the content outline of the subject (maximum 40 points). Final assessment: cumulative percentage gain from the interim assessment (50%) and the oral practical exam (50%). Subject evaluation: A – 100%-93% B – 92%-85% C – 84%-77% D – 76%-69% E – 68%-60% Fx – 59%- 0%	
<b>Learning outcomes of the course:</b> After completing the subject, the student will acquire the following knowledge, skills and competences: - is able to deal critically with the theoretical background from applied chemistry to the environment, - knows how to implement, monitor and analyze in the laboratory, in the field the quality of monitored indicators for selected components of the environment, - is able to analyze and synthesize new knowledge from professional and scientific literature in the field of environmental chemistry and implement them appropriately in pedagogical practice.	

**Course contents:**

1. Biosphere, human living and working environment.
2. Air and its pollution.
3. Water and its pollution.
4. Land and its protection.
5. Treatment and purification of water.
6. Limitation of air pollution.
7. Radioactive contamination of the natural environment.
8. Waste disposal.
9. Assessment of pollution of environmental components.
10. Water analysis.
11. Soil analysis.
12. Assessment and management of environmental risks.

**Recommended or required literature:**

- ILAVSKÝ, J. a kol., 2008. Chémia vody a hydrobiológia. STU Bratislava, 2008, 303 s., ISBN 978-80-227-2930-7.
- PITTER, P., 2009. Hydrochemie. VŠCHT Praha, 2009, 579 s., ISBN 978-80-7080-701-9.
- VYSOUDIL M., 2002. Ochrana ovzduší. Univerzita Palackého v Olomouci, Olomouc, 2002, 114 s., ISBN 80-244-0400-1.
- PROUSEK, J., ČÍK, G., 2011. Základy ekológie a environmentalistiky. STU, Bratislava, 2011, 212 s., ISBN 978-80-227-3601-5.
- ČERMÁK, O., a kol., Životné prostredie. Bratislava : Slovenská technická univerzita , 2008, 390 s. ISBN 978-80-227-2958-1.

**Language of instruction:**

English language.

**Notes:****Course evaluation:**

Assessed students in total: 12

A	B	C	D	E	FX
91.67	0.0	0.0	8.33	0.0	0.0

**Name of lecturer(s):** Ing. Dana Blahútová, PhD.

**Last modification:** 22.08.2022

**Supervisor(s):**

**Guarantor:**

Administrátor Systému

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

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