

COURSE INFORMATION SHEET

University: Catholic University in Ružomberok	
Faculty: Faculty of Education	
Course code: KCH/Ch-BD102B/22	Course title: Environmental Chemistry
Type and range of planned learning activities and teaching methods: Form of instruction: Lecture Recommended study range: hours weekly: 2 hours per semester: 26 Teaching method: on-site	
Credits: 2	Working load: 50 hours
Recommended semester/trimester: 2.	
Level of study: I.	
Prerequisites:	
Requirements for passing the course: The final assessment will be based on a written test of 90 points max. Subject evaluation: A – 100%-94% B – 93%-88% C – 87%-81% D – 80%-75% E – 74%-69% Fx – 68%- 0%	
Learning outcomes of the course: To provide students with information about chemical substances and processes in the hydrosphere, its pollution, cleaning processes and measures for the protection of water and water resources. Students know the basic methods for the analysis and technology of water and its chemical and biological pollution. They have cultivated positive relationship to the environment.	
Course contents: 1. General knowledge about the hydrosphere. 2. Physical and chemical properties of water. Basic knowledge about water. Sensoric properties of water. 3. Chemical composition of waters. Atmospheric, underground and surface water. 4. Water analysis. COD. BOD. The need and quality of water. Water resources and water withdrawal. 5. Waste water. 6. Saprobity and toxicity of water. 7. Eutrophication of waters. Aerobic and anaerobic biological processes in water. 8. Physical, chemical and biological processes of water treatment and wastewater treatment. 9. Health assurance of treated water. 10. Sludge management of WWTPs and water treatment plants. Water systems. 11. Drainage and drainage network. Processes and equipment of WWTPs and water treatment plants.	

12. Activation of wastewater. Technological line and sludge disposal processes. Treatment of wastewater from various industries.					
Recommended or required literature:					
Language of instruction:					
Notes:					
Course evaluation:					
Assessed students in total: 7					
A	B	C	D	E	FX
71.43	0.0	0.0	0.0	0.0	28.57
Name of lecturer(s): doc. Ing. Jaroslav Demko, CSc., doc. RNDr. Miroslav Rievaj, PhD.					
Last modification: 22.07.2022					
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.					