COURSE INFORMATION SHEET

University: Catholic University in Ružomberok	
Faculty: Faculty of Education	
Course code: KGE/Ge-BD107A/22	**Course title:** Physical Geography 3 (Climageography and Hydrogeography)
Type and range of planned learning activities and teaching methods: **Form of instruction:** Lecture / Seminar **Recommended study range:** **hours weekly:** 2 / 2 **hours per semester:** 26 / 26 **Teaching method:** on-site	
Credits: 3	**Working load:** 75 hours
Recommended semester/trimester: 3.	
Level of study: I.	
Prerequisities: KGE/Ge-BD104A/22	

Requirements for passing the course:

Verification of the degree of acquisition of relevant knowledge, skills and competencies of the student is carried out based on the evaluation of the student's ongoing tasks during the semester and on the basis of the evaluation of the written test and the final oral exam. During the semester, active participation in seminars is required in the form of preparation and presentation of seminar exercises on assigned topics. At the end of the semester, the student proves his theoretical knowledge first in the form of a written test. In order to participate in the final oral exam, it is necessary to obtain at least 60% of the points from the test.

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:

the student has basic knowledge of climate geography, the climate on Earth, individual meteorological elements (solar radiation, air temperature, air humidity, precipitation, air pressure, air flow), general circulation of the atmosphere and climatic zones,

the student has basic knowledge of hydrogeography, about hydrological balance and cycles, surface and subsurface waters, temporal and spatial differentiation of climatic and hydrological processes on Earth,

can statistically process data from climatological and hydrological observations, apply acquired knowledge in field and other exercises, use literature and other sources to process the basic characteristics of the climatic and hydrological conditions of the selected area,

can apply the acquired knowledge in a specific area and when teaching geography at primary and secondary schools.

Course contents:

1. Definition and classification of meteorology and climatology. Atmosphere, its properties, composition and vertical division. Basic meteorological elements, climate-forming factors. 2. Solar radiation, changes in solar radiation passing through the Earth's atmosphere, Earth's radiation, the greenhouse effect of the atmosphere. Air temperature and its measurement. 3. Air humidity, evaporation and condensation. Atmospheric precipitation, their daily and annual course,

distribution of annual totals of atmospheric precipitation on Earth. 4. Air pressure, basic pressure (baric) formations and their characteristics. Wind and its basic characteristics. 5. Air masses and atmospheric fronts, their division and basic characteristics. 6. General circulation of the atmosphere. 7. Climatic classifications and climatic zones on Earth, climatic classification of Slovakia. 8. Definition and classification of hydrology. Hydrological balance, hydrological cycle on Earth, hydrological cycle in the basin. 9. Hydrology of surface flows, hydrography and hydrometry. 10. Subsurface water. 11. Hydrology of stagnant waters (lakes and artificial water reservoirs). 12. World ocean, its distribution and importance, pollution of oceans and seas. Water masses and dynamics of the world ocean (ocean currents, their origin, distribution and importance). 13. Hydrological regions of the world ocean.

Recommended or required literature:

TRIZNA, M. (2012). Climatography and hydrogeography. Geo-grafika, Bratislava, 154 p. TRIZNA, M. (2007). Meteorology, Climatology and Hydrology for Geographers. Geo-grafika, Bratislava, 144 p. THURMAN, H.V., TRUJILLO, A.P. (2005). Oceanography. Computer Press, Prague, 479 p. ZAŤKO, M. (2011). Water resources, their use and protection. Faculty of Science, UK, Bratislava, 5 p. Available online: http://www.fyzickageografia.sk/geovedy/texty/zatko.pdf BELLA, P., HAVIAROVÁ, D. (2017). Types of cave lakes in Slovakia according to geological and geomorphological conditions and processes of their formation. Aragonite, 22, 2, 49–56. Available on the Internet: http://www.ssj.sk/user_files/Aragon22_2_web2.pdf

Language of instruction:
Slovak

Notes:

Course evaluation:
Assessed students in total: 36

A	B	C	D	E	FX
19.44	16.67	11.11	27.78	19.44	5.56

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

Last modification: 31.08.2022

Supervisor(s):

Guarantor:
Administrátor Systému

People responsible for the delivery, development and quality of the study programme:
prof. ThDr. Rastislav Adamko, PhD., doc. 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.