

COURSE INFORMATION SHEET

University: Catholic University in Ružomberok	
Faculty: Faculty of Education	
Course code: KGE/52G1002W/15	Course title: Physical Geography 1
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 (distance method according to the document Príkaz rektora P-8/2020 since 15. 10. 2020)	
Credits: 3	
Recommended semester/trimester: 1.	
Level of study: I.	
Prerequisites:	
Requirements for passing the course: The course begins with an introductory test to verify students' knowledge and ends with an outgoing test, which is included in the evaluation of the final oral exam. The student proceeds to perform the final exam only if the final examination achieves a rating of more than 20 points out of a possible 80 points. The number of achieved points from the final examination divided by 1/2 gives the student to the final evaluation max. 40%. During the oral exam in the form of answers to three of the selection of 54 questions, the student can get max. 60% of the rating. Final evaluation of the course: A - 100% -94%, B - 93% -88%, C - 87% -81%, D - 80% -75%, E - 74% -69%, FX - 60% -0 %	
Learning outcomes of the course: The student knows and understands the structure of the lithosphere, the composition of the Earth's crust, endogenous processes and the geodynamic development of the Earth. He knows the historical development of the Earth, the time geological scale and geological periods. It defines the conditions of rock formation and deformation, crystallization of minerals, accumulation of sediments, etc. He knows the basic knowledge of the regional geology of Slovakia and an overview of the geological structure of Europe. Understands the principles of the classification system of rocks and minerals, mechanisms of lithosphere plates, mountain-forming and solid-forming processes, the course of the rock cycle in the development of the lithosphere (the so-called Wilson cycle), age dating methods in geology, principles of regional-geological division of the Western Carpathians. It classifies rocks and minerals, determines the shapes of igneous and volcanic bodies, solves spatial and temporal relationships of geological bodies, is able to inform about scientific and cognitive geoscientific information from the regions of Slovakia, reads basic information from geological maps.	
Course contents: The position of the Earth in the planetary system and cosmogenic hypotheses of its origin and development. Structure, properties and internal dynamics of the Earth's body. Endogenous processes: magmatism, metamorphism, earthquakes and tectonics. Magma, shapes of igneous and volcanic bodies, conditions and degrees of metamorphosis, tectonic structures and rock deformation. Exogenous processes: denudation and erosion of the earth's surface, rock cycles - weathering, transport, sedimentation and litification, facies and environment of sedimentary rock formation, etc .. Classification of rocks and minerals, properties and systems of igneous,	

metamorphic and sedimentary rocks. Lithospheric plate tectonics, evidence of continental drift, motive forces of plates, passive and active edges of continents, seismic activity and earthquakes, etc. Types of lithospheric interfaces, Wilson's geotectonic cycle, mountain-forming and solid-forming processes. Divergent interfaces, riftogenesis, mid-ocean ridges, formation and expansion of the oceans. Convergent interfaces, subduction zones, deep ocean trenches, volcanic arches, collisions of lithospheric plates, orogenesis and formation of zonal mountains. Historical geology, main stratigraphic concepts - discordance, hiatus, transgression, regression, etc. Time geological scale and main geological periods in the development of the Earth. Geological structure of Europe - shields and boards, Caledonian, Hercynian and Alpine orogenic systems. The position of the Western Carpathians in the Central European Alpidic system. Geological structure of the Western Carpathians, regional-tectonic division, units of the Tatra-Fatra, Vepor and Gemer zones, core mountains, volcanic mountains, Neogene basins, ridge zone and units of the Outer Western Carpathians. Geological structure and history of the European continent and global paleogeography of the Earth.

Recommended or required literature:

1. Bizubová, M. (1998): Fundamentals of Geology for Geographers. University scripts, Faculty of Science, Charles University, Bratislava.
2. Prokešová, R. (1998): Basic knowledges of general geology. University scripts, Matej Bel University, B. Bystrica.
3. Hók, J., Kahan, Š. & Aubrecht, R. (2001): Geology of Slovakia. PRIF UK Bratislava (internet on-line)
4. Soták, J. (2016): Structure, composition and dynamics of the Earth. VERBUM - publishing house of the Catholic University in Ružomberok, CD-ROM, ISBN 978-80-561-0416-3
5. Soták, J. (2016): Geological history and paleogeography of the Earth. VERBUM - publishing house of the Catholic University in Ružomberok, CD-ROM, ISBN 978-80-561-0415-6

Language of instruction:

English language

Notes:

Course evaluation:

Assessed students in total: 107

A	B	C	D	E	FX
15.89	11.21	21.5	29.91	12.15	9.35

Name of lecturer(s): doc. RNDr. Ján Soták, DrSc.

Last modification: 13.05.2021

Supervisor(s):