

Informačný list predmetu (Course description)

Vysoká škola (University): Comenius University in Bratislava													
Fakulta (Faculty): Faculty of Natural Sciences													
Kód predmetu (Code): PriF.KMPLG/N-mMPL-006/22	Názov predmetu (Course): Applied Mineralogy and Petrology 2												
Druh, rozsah a metóda vzdelávacích činností (Study design): Seminar, weekly, 2 hours seminar, 24 hours per semester. Method of study: full time, combined.													
Počet kreditov (Number of credits earned): 2													
Odporúčaný semester/trimester štúdia (Recommended semester): 1. Winter semester													
Stupeň štúdia (Degree): 2. Degree													
Podmieňujúce predmety (Prerequisite courses): none													
Podmienky na absolvovanie predmetu (Grading policy): To obtain an A grade, it is necessary to demonstrate 92-100% of the required knowledge; to obtain a B grade 84-91%, for a C grade 76-83%, for a D grade 68-75% and for an E grade 61-67% of the required knowledge.													
Výsledky vzdelávania (Course objectives): By completing the subject, the student will gain more detailed knowledge about the possibility of using the knowledge of mineralogical-petrological study and research of mineral raw materials in the applied technological research of materials produced in various industries from primary natural raw materials, but also from waste material.													
Stručná osnova predmetu (Syllabus): Definition of geomaterials, basic types of geomaterials and their industrial applications. Products of thermal treatment of selected industrial minerals (mineralogical-petrological characteristics of basic components, production technology, standardized assessment). Refractory materials - an overview of input raw materials and their transformational technological processes in the production of products. Glass and petrified products: mineral wool and basalt fiber. Hydrothermal process of formation of CSH phases in the production of aerated concrete. Diatomite - use in its natural state and after heat treatment. Conditions for the synthesis of zeolites and their applications. Smectite minerals as sorbents of toxins and as carriers of medicinal components. Environmental raw materials - classification and examples of their characterization.													
(1) Ingham, J., 2011: Geomaterials under the Microscope – A Color Guide. 192 p.; (2) Poole, B. A., Sims, I., John, St. D., 2011: Concrete petrography. A Handbook of Investigative Techniques. 2 edition, 480 p.; (3) Broekmans, M.A.T.M., Pöllman, H. (eds.), 2012: Applied Mineralogy of Cement and Concrete. Reviews in Mineralogy and Geochemistry, 74. 364p.													
Jazyk, ktorého znalosť je potrebná na absolvovanie predmetu (The course is held in): English language.													
Poznámky (Other course information):													
Hodnotenie predmetov (Grading history)													
<table border="1"><thead><tr><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>FX</th></tr></thead><tbody><tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td></tr></tbody></table>		A	B	C	D	E	FX	a	b	c	d	e	f
A	B	C	D	E	FX								
a	b	c	d	e	f								
The percentage of students evaluated who received an A, B, ... Fx. The total sum of a, b, c, d, e, f is 100. If a student has obtained FX in one year and after the next entry of the course, the D rating shall be taken into account.													
Vyučujúci (Professor): Assoc. Prof. Peter Uhlík, PhD., Assoc. Prof. Peter Ružička, PhD., Assoc. Prof. Marek Osacký, PhD.,													
Dátum poslednej zmeny (Last update):													
Schválil (Approved by): prof. RNDr. Monika Huraiová, PhD.													

