Information sheet for the course
Basic mineralogy and Petrography

University: *Alexander Dubček University of Trenčín*

Faculty: *Faculty of Industrial Technologies in Púchov*

Course unit code: *MI-P-31*	**Course unit title:** *Basic mineralogy and Petrography*

Type of course unit: *compulsory*

Planned types, learning activities and teaching methods:
Lecture: 2 hours weekly/26 hours per semester of study; face to face
Seminar:1 hours weekly/13 hours per semester of study; face to face
Laboratory tutorial:

Number of credits: *5*

Recommended semester: *5th semester in the 3rd year full-time*
7th semester in the 3rd year part-time

Degree of study: *the 1st degree of study (Bachelor's degree)*

Course prerequisites: *none*

Assesment methods:
Student must elaborate semestral work and present it during semester. There will be one test on the end semester. Active presence on the seminars.

Learning outcomes of the course unit:
Student control basic principle outside mineralogy and petrography select rocks and minerals controls the basic characteristics and based on the properties and chemical composition, can assume use to industrial practice and in the economy.

Course contents:
Introduction to mineralogy and petrography, formation of rock, the emergence and development of minerals, Incidence and industrial use of rocks and minerals, Physical properties of minerals, Systematic mineralogy: the basic division of minerals, sulfides and related compounds, selenium, tellurium, arsenic, antimony and bismuth, Systematic mineralogy: halides, oxides, hydroxides, Systematic mineralogy: nitrates, carbonates, borates, sulphates, phosphates, Systematic mineralogy: nesosilicates, sorosilicates,. Systematic mineralogy: cyclosilicates, inosilicates, Systematic mineralogy: phyllosilicates, tektosilicates, Industrial importance silicates; Organolites.

Recommended of required reading:
Holub F. Obecná a magmatická petrologie. – Karolinum Praha (2002)
M.GREGOR, B.ČÍČEL: BENTONIT A JEHO VYUŽITIE. VSAV, Bratislava 1969.
DÁVIDOVÁ, Š.: Základy mineralógie. UK Bratislava 5. vydanie, 1996.
DAVIDOVÁ, Š.: Fyzikálne vlastnosti mineralóv, Skriptá PF UK Bratislava, 1998.
GREGEROVÁ, M., 1996: Petrografie technických hmot. Masarykova univerzita, Brno,
ZUBEREC, J., TRÉGER, M., LEXA, J., BALÁŽ, P., 2005: Nerastné suroviny Slovenska.
ŠGÚDŠ, Bratislava, 350 s.
Mikroskopické praktikum – University of Bristol EN www.gly.bris.ac.uk/www/teach/opmin/mins.html
Minerály vo výbrusoch EN http://www.nslc.ucla.edu/pet/browse.html

Language: *Slovak*

Remarks:

Evaluation history:

A	B	C	D	E	FX

Lecturers: *prof. RNDr. Mariana Pajtášová, PhD.*

Last modification: *31.3.2014*

Supervisor: *prof. Ing. Darina Ondrušová, PhD.*