



Introduction to ore microscopy

Earth Sciences Engineering MSc course

2020/21. I. semester

COURSE COMMUNICATION FOLDER

University of Miskolc

Faculty of Earth Science and Engineering

Institute of Mineralogy and Geology

1. Course datasheet

Course Title: Introduction to ore microscopy Instructor: Dr. Norbert Zajzon, Máté Zsigmond Leskó	Tantárgy kódja: MFFAT 730143 Responsible department/institute: ÁFI
Position on curriculum (which semester): 3. semester	Pre-requisites (if any): -
No. of contact hours per week (lecture + seminar): 1+1	Type of Assessment (examination/ practical mark / other): practical mark
Credits: 2	Course: full time
Study goal: The course will allow students to gather knowledge on the basics of the ore (reflected) microscope, the important ore minerals and structures. Competencies to evolve: Knowledge: T1, T5, T7, T8, T9 Ability: K1, K2, K5, K6, K9, K11 Attitude: A1, A2, A3, A4, A5, A7 Autonomy and responsibility: F1, F2, F3, F4, F5	
Education method: Theoretical lectures with .ppt presentation, laboratory exercises with the most important mineralogy samples.	
Type of Assessment (exam. / pr. mark. / other): practical mark: Grading limits: > 80 %: excellent 70 – 80 %: good 60 – 70 %: medium 50 – 60 %: satisfactory < 50 %: unsatisfactory	
Compulsory or recommended literature resources: Craig J. R és Vaughan D. J. (1994): Ore microscopy and ore petrography, Wiley-Interscience Publication, New York Taylor R. (2009): Ore Textures, Springer, London	

2. Tematics

Week		Thematics
1	10.09.2020.	Intorduction, requirements
2	17.09.2020.	Basic optics, lecture
3	24.09.2020.	Intorduction to ore (reflected) microscope
4	01.10.2020.	Examination from theoretical parts
5	08.10.2020.	Native elements (lecture)
6	15.10.2020.	Native elments (practice)
7	22.10.2020	Sulphids (lecture)
8	29.10.2020.	Sulphids (practice)
9	05.11.2020.	Oxides (lecture)
10	12.11.2020.	Oxides (practice)
11	19.11.2020.	Structures, textures (lecture)
12	26.11.2020	Structures, textures (practice)
13	03.12.2020.	Consultation
14	10.12.2020.	Examination

Introduction to ore microscopy, examination

Name:.....

- 1) Please sketch how the ore (reflected) microscope looks like and how it is working!
- 2) What is the wavelength of the visible light?
- 3) What kind of minerals could be isotropic?

Practical examination

The students get 2-3 sample, and they have to

- identify the ore minerals
- identify the structures
- identify the ore type (if it is possible)