Department: Mining Engineering **Division:** Mining Exploitation and Rock Mechanics

Level and Major: BSc, Mining Exploitation and Rock Mechanics

Course Title: Mineralography

Number of Credits: 1

Prerequisite: Economic Geology Lecturer: Dr. Abbas Maghsoudi

Course Description

Mineralography (Ore microscopy) is the study of ore minerals in polished sections by means of a polarizing and reflected-light microscope.

Course Goals and Objectives

Identification of ore minerals in polished section.

Course Topics

- Optical properties of minerals
- Components of the ore microscope
- Preparation of polished sections
- Ore mineral textures
- Mineral identification

Reading Resources

- Craig and Vaughan, 1994, Ore microscopy and ore petrography, John Wiley & Sons, INC.
- Picot and Johan, 1982, Atlas of Minerals, Elsevier Press.
- Pracejus, B., 2008. The ore mineral under the microscope, Elsevier Press.
- Taylor, R., 2009. Ore Textures Recognition and Interpretation, Springer-Verlag Berlin Heidelberg.

Evaluation

• Quiz: 20 %

• Final Exam: 80%