

**Department:** Mining Engineering

**Division:** Mining Exploration and Mineral Processing

**Level and Major:** BSc, Mining Exploration and Mineral Processing

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**Course Title:** Mineralogy

**Number of Credits:** 1

**Prerequisite:** Economic Geology

**Lecturer:** Dr. Abbas Maghsoudi

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### **Course Description**

Mineralogy (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%