

Department: Mining Engineering

Division: Mining Exploitation and Rock Mechanics

Level and Major: BSc, Mining Exploitation and Rock Mechanics

Course Title: Special Topics (Introduction and Principles of Mining Engineering)

Number of Credits: 1

Prerequisite: -

Lecturer: Dr. Majid Ataee Pour

Course Goals and Objectives

Getting familiar with principles of Mining Engineering

Course Topics

- Introduction
- Geology, Mineral, and rock
- Exploration and reserve estimation
- Mine opening and development
- Surface mining
- Underground Mining
- Drilling and blasting
- Loading and haulage
- Mine ventilation and auxiliary operations
- Mine Equipment
- Mineral processing

Reading Resources

- Introductory Mining Engineering, Hartman, H L and Mutmansky, J MSeond Edition, 2002
- Hartman, H. and Mutmansky, J. (2002). Introductory mining engineering. Hoboken, N.J.: J. Wiley.
- Gregory, C. (1983). Rudiments of mining practice. Clausthal-Zellerfeld: Trans Tech.
- Tatiya, R. (2005). Surface and underground excavations: Methods, Techniques and Equipment. Boca Raton, Fla.: CRC.