

Department: Mining Engineering

Division: Mineral Processing

Level and Major: MSc, Mineral Processing

Course Title: Advanced Mineral Processing

Number of Credits: 2

Lecturer: Dr. Mehdi Irannajad

Course Goals and Objectives

Advanced methods and mass balancing in mineral processing circuits.

Course Topics

- Sampling in mineral processing circuits in different scales
- Mass balancing methods
- Metallurgical accounting
- Metallurgical balance sheet in a plant
- Using dilution and particle sizes in mass balancing
- Max precision in recovery
- Reconciliation using Lagrangian
- Mass balancing in complex circuits
- Sampling in a mineral processing plant

Reading Resources

- Mass balancing in mineral processing systems. S. Banisi
- Mineral processing Technology, B.A., Wills