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

Level and Major: BSc, Mining Exploitation and Rock Mechanics

Course Title: Fluid Mechanics Number of Credits: 3

Prerequisite: Mathematics 1 Lecturer: Dr. Saeid Nikoosokhan

## **Course Goals and Objectives**

Teaching fundamentals of Fluid Mechanics and its applications in Mining Engineering

## **Course Topics**

- Fluid Mechanics in Mining Engineering and Petroleum Geomechanics
- Fluid Properties
- Fluid statics
- Fluid flow, main concepts and equations
- Dimensional analysis
- Laminar and Turbulent
- Compressible Flow

## **Reading Resources**

• V.L Streeter, E.B. Wylie, Fluid Mechanics, A.R Entezari