



Course Name:

Environmental Geotechnics

Course Number: 20-442	Credit: 3
Program: Graduate	Course Type: Technical Selective
Prerequisite: -	Corequisite: -

Course Description (Objectives):

The main goal of this course is to examine the role of geotechnics in environmental issues. In this context, students will become familiar with concepts related to soil contamination and the governing equations for pollutant transport in soils.

Course Content (outline):

- Chapter 1: Introduction and Basics
- Chapter 2: Review of geotechnical properties of soils and rocks
- Chapter 3: Soil contamination
- Chapter 4: Groundwater contamination
- Chapter 5: Disposal of municipal solid waste
- Chapter 6: Disposal of industrial waste
- Chapter 7: Disposal of solid and liquid mining waste
- Chapter 8: Nuclear waste disposal

References:

- Environmental Science and Engineering, Henry/Heinke, 1996, Prentice Hall
- Introduction to Environmental Geotechnology. Y. Fang, 1997, CRC press
- Soil Mechanics for Unsaturated Soils, Fredlund & Rahradjo, 1993