



Faculty of Earth Sciences



Geophysics Department



The Geological Society
Accredited degree courses

INTRODUCTION TO GEOPHYSICS

Course Name	Course ID	Prerequisites
<i>INTRODUCTION TO GEOPHYSICS</i>	<i>EGP 211</i>	<i>EMR 201, PHYS 110, PHYS 281</i>

Course Description

Introduction to the physics of the earth including earthquakes, earth gravity, magnetism, plate tectonic theory, introduction to seismic exploration methods, resistivity, gravity and magnetic methods, acquainting with radiometry and thermal methods, well logging and instrumentation.

Course Objectives

The student will have an introduction to various aspects of the study of the physics of the Earth. Stress and strain, deformation, isostasy, seismic waves, earthquakes, earth structure, resource exploration, earth dynamics, plate tectonics, mountain building, gravity and geodesy, magnetic field, and heat flow. Included are bi-weekly homework and quizzes.

General References for the Course: (Books/Journals...etc.)

Students in this course can read from:

1. Geophysics/Leading Edge

List of URLs for this Course

- <http://www.mines.edu/academic/courses/geophysics/>

Course Outcome

The student will gain a wide basic knowledge on different geophysical disciplines. The student will learn the following:

1. Student can know the basic knowledge on the different geophysical disciplines.
2. Student can have the solid background on the different geophysical techniques.
3. Student can have the basic geoelectric methods and Basic magnetic methods.
4. Student can know the basic gravity methods and basis of seismic method.