

GEOL.601:

GENERAL GEOLOGY (General)

3(3-0)

Course Objectives

The aim of this subject is to make understand our students about the origin, age and formation of certain geological structures regarding how the earth was forced.

Learning Outcome

The students will be able to identify the rocks and its structure and to critically evaluate the theories regarding the earth evolution.

Course Outline

1. Introduction

- Nature and Scope
- Relationship with other sciences
- Significance.

2. Earth as a member of Solar System

- Origin
- Age
- Composition
- Internal structure

3. Minerals

- Physical properties
- Rocks
- Earthquakes and volcanoes

4. Weathering and Erosional Processes

- Related landforms
- Primary sedimentary, igneous and metamorphic structures

5. Mountains Building Activities

- Folds, faults and joints
- Mountain building processes: Plate tectonics

Lab. Work

Identification of Rocks, folds and faults.

Recommended Books

1. Edward J. Tarbuck, Frederick K. Lutgens, Dennis G. Tasa, (2016) "Earth: An Introduction to Physical Geology", by. Pearson Education
2. Plummer C., Diane Carlson, Lisa Hammersley (2015) "Physical Geology", 15th Edi. Charles (Carlos) McGraw-Hill Education
3. Robert Rutherford, James Carter, James Zumberge, (2013) "Laboratory Manual for Physical Geology", McGraw-Hill Higher Education.
4. James Hutton, (2012) "Theory of the Earth", GmbH, Hamburg, Germany
5. Gary Allen Smith, Aurora Pun, (2010) "How Does Earth Work?: Physical Geology and the Process of Science", Pearson Prentice Hall.