



# **Faculty of Earth Sciences**





# Department of Mineral Resources & Rocks 3rd & 4th Years Program



### **B. SC. PROJECT**

Course Name	Course ID	Prerequisite
B. Sc. Project	EMR 499	EMR 399

# **Course Description**

Each student will be assigned a field and laboratory project for at least three weeks. The student will prepare at its end a scientific report. It will be presented in a talk under the supervision of a staff member of the department. It is preferable to have the training in a specialized company.

# **Course Objectives**

- 1. Students will have field training.
- 2. Student will be familiar with methods of sample collections.
- 3. Students will be acquainted with some laboratory techniques.
- 4. Students will know how to interpret data, correlate data with field observations, and getting conclusions.
- 5. Students will know how to present the data, write the subject of the project, and discuss conclusions in a scientific report.

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

Students in this course can read from vary depending on the subject of the project:

- 1. An Introduction to Economic Geology and Its Environmental Impact, by Evans M., 1997. Blackwell Science. 364 p.
- 2. Analytical Methods in Geochemical Prospecting. Handbook of Exploration Geochemistry, Vol. 1, by Fletcher, W.K., 1981. Elsevier, Amsterdam
- 3. Economic Geology and Mineral Resources in the Kingdom of Saudi Arabia (3rd Edition), by Yamani, M.A., 1985. (In Arabic)
- 4. Geology of the Arabian Peninsula: Shield Area of Western Saudi Arabia, by

Brown G.F., Schmidt and Huffman A.C. JR., 1989, U.S.G.S., Prof. paper 560-A. P.163-188.

- 5. *Minerals Deposits in KSA*, by Al Shanty A. M. S., 2005. Centre of Scientific Publication, King Abdulaziz University, Jeddah, KSA, 312p. (In Arabic)
- 6. Modern Analytical Geochemistry, by Gill, R.C.O., 1997. Longman
- 7. Physical Methods in Determinative Mineralogy, by Zussman, 1977. Academic Press, London.
- 8. Reports and Periodicals: from the Saudi Arabia Geological Survey, Ministry of Mineral Resources, Maaden Company and specialized web sites.

### List of URLs for this Course

- <a href="http://www.sgs.org.sa/">http://www.sgs.org.sa/</a>
- http://www.usgs.gov/

#### **Course Outcome**

By the end of this course, students should be:

- 1. Student can be able well trained in the fieldwork related to some mineral deposits.
- 2. Student can be familiarize with methods of sample collections.
- 3. Student can be acquainted with some laboratory techniques and familiar with data interpretation.
- 4. Student can able to develop own thoughts about correlation of laboratory results and field observations.
- 5. Student can be acquainted with data presentation, writing, and discussing conclusions in a scientific report.