



Faculty of Earth Sciences



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



The Geological Society
Accredited degree courses

GEOCHEMISTRY OF MINERAL DEPOSITS

Course Name	Course ID	Prerequisite
<i>GEOCHEMISTRY OF MINERAL DEPOSITS</i>	<i>EMR 442</i>	<i>EMR 332</i>

Time Table for Course Lectures

Geochemistry of Mineral Deposits (EMR 442)

Week	Lecture Topic
1	Course Outline and Definitions ^[1]
2	Geochemical Signature of Ore Deposits Using Major Oxides, Trace Elements, and Rees ^[2]
3	Geochemical Signature of Ore Deposits Using Stable Isotopes ^[2]
4	Fluid Composition in Ore Forming Processes ^[2]
5	Geochemistry of Wallrock Alterations ^[2]
6	Geochemistry of Fluorine and Fluorite Deposits ^[3]
7	Geochemistry of Beryllium Deposits ^[3]
8	Geochemistry of Strontium and Barium Deposits ^[3]
9	Bauxite Deposits and Their Geochemical Characteristics ^[1]
10	Iron Ore Deposits and Diversity in their Geochemistry ^[1,3]
11	Geochemical Signatures of Banded-Iron Formations ^[4]
12	Geochemistry of Manganese Deposits ^[1,3]
13	Geochemistry of Uranium and Uranium Deposits ^[1-3]
14	Geochemistry of Lead-Zinc Deposits ^[1]
15	General Revision and Presentation of Assignments
16	Final Exam

References:

[1] *Geochemistry of Sedimentary Ore Deposits*, by Maynard, J.B., 1983. Springer-Verlag, New York Inc., USA.

[2] *Geochemistry of Hydrothermal Ore Deposits. 3rd ed.*, by Barnes H.L., 1997. John

Wiley & Sons, New York.

[3]*Geochemistry of Stratabound Deposits in China*, by Guanghzi, T., 1996. J. C. Leiden, The Netherlands.

[4]*Introductory Mining Engineering. 2nd ed.*, by Hartman, H.L. and Mutmansky, J.M., 2002. John Wiley & Sons, USA