



Faculty of Earth Sciences





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



VOLCANOLOGY

Course Name	Course ID	Prerequisite
Volcanology	EMR 321	EMR 304

Time Table for Course Lectures

VOLCANOLOGY EMR (321)

Week	Topic
1	Introduction and course details
	Internet sites for the course
2	Physical properties of the magma
	Magma generation and ascent
3	Volcanic activity and plate tectonics
	Types and classifications of volcanic eruptions-1
4	Types and classifications of volcanic eruptions-2
	Lavas-1
5	Lavas-2
	Volcanoclastic rocks-1
6	Volcanoclastic rocks-2
	Periodical exam-1& revision
7	Volcanic landforms-1
	Volcanic landforms-2
8	Tutorial volcanic film
	Modern and ancient volcanic successions
9	Volcanic facies
	Periodical Exam-2 and revision
10	Volcanic successions in the Arabian Shield
11	Volcanism in Saudi Arabia and the Red Sea region
12	Mineralization associated with volcanism/ metals
	Essays written by students

13	Mineralization associated with volcanism/ Industrial rocks and minerals	
	Volcanism and energy	
14	Monitoring volcanic activity	
	Volcanic risks	
15	Volcanic risks	
	General revision	
	Final Exam	

References:

Volcanoes, a Planetary Perspective, by Francis, P., 1995. Oxford [1] University Press.

Volcanoes and Society, by Chester, D., 1993. London, Edward Arnold, [2] 351 p.

Volcanology, by, Williams, H., and McBirney, A.R., 1979. Freeman, [3] Cooper & Co.