

Course Syllabus

1. Course number and name: 020GELCI4 Geology
2. Credits and contact hours: 2 ECTS credits, 1:15 course hours
3. Instructor's or course coordinator's name: Soumaya Ayadi Maasri
4. Text book :
 - a. other supplemental materials:
Professor textbook and course material

5. Specific course information
 - a. brief description of the content of the course (catalog description)

This course aims to introduce fundamental concepts of geology. It focuses on the structural geology, stratigraphy and petrography.

It covers the brittle and ductile deformation and explains the behavior of material in front of different kind of stress, extensive and compressional.

It also presents the different types of rocks, their genesis context, their physical properties and their organoleptic classification.

- b. prerequisites or co-requisites: None

- c. Required/Elective/Selected Elective: Required

6. Specific goals for the course
 - a. specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic.
 - Recognize the internal structure of the earth by analyzing the seismic waves velocity and propagation
 - Identify the material competence by analyzing their behavior facing a stress
 - Make a coherent structural and stratigraphic analysis of the outcropping geologic structures
 - Understand and recognize the different kind of rocks by their identification criteria

- b. KPIs addressed by the course.

KPI	a2	b1	b3	c1
Covered	X	X	X	X
Assessed	X	X	X	X
Give Feedback	X	X	X	X

7. Brief list of topics to be covered and approximate lecture hours :
- Internal structure of the earth (1 Lecture)
 - Structural Geology
 - Concept of general Tectonic (1 Lecture)
 - Brittle deformation (2 Lectures)
 - Ductile deformation (2 Lectures)
 - Tangential tectonics (1 Lecture)
 - Cartography (1 Lecture)
 - Stratigraphy - Relative chronology (2 Lectures)
 - Materials of the Earth's crust: Mineralogy- petrography
 - Mineralogy: Crystallization and identification criteria (1 Lecture)
 - Igneous, sedimentary and metamorphic rocks (2 Lectures)
 - Sedimentary rocks, identification criteria (1 Lecture)