College: Engineering Department: civil Engineering

Course Title: Engineering Geology

Course No:
CE 212

Credit Hours:
3 h

Semester: 2021/2020

About The Course

Course Title: Engineering Geology Class:
Course No: CE 212

Credit Hours: 3 h Lecture Room: 408

Obligatory/ Optional:
Text Book: Physical Geology, sixth edition , Charles C. Plummer and David McGeary

The Instructor

Name: Eng. Dua M. Al-Afeef Title: full time lecturer

Office Tel:

Office No: 201 Office Hours: sun. tus. 11-12
Mon. wed 8-11

E-mail: de-8888@yahoo.com

Course Description

A study of earth materials, formation of rocks, surface feature, surface and internal structures and their relationship to engineering works, analysis of the agents of weathering, erosion, diastrophism and their effect on engineering construction.

Course Objectives

Furnish the student with basic understanding of the origin of the earth, formation of rocks, minerals in the rock, types of rocks, texture of rocks, physical and engineering properties of rocks, building of mountains, plate tectonics, earthquakes, faults, types of faults.

Learning Outcome

1. Introduction to engineering geology
2. Silicate minerals and non-silicate minerals
3. Physical properties of minerals
4. Rock types and their formation
5. Building up mountains and types of mountains
6. Plate tectonics, Earthquake, faults, types of faults

Course Outline and Time schedule

Week	Course Outline
First week	Introduction to engineering geology
2nd week	Introduction to engineering geology
3rd week	Silicate minerals and non-silicate minerals
4th week	Silicate minerals and non-silicate minerals

5th week	Physical properties of minerals
6th week	Physical properties of minerals
7th week	Rock types and their formation
8th week	Rock types and their formation
9th week	Building up mountains and types of mountains
10th week	Building up mountains and types of mountains
11th week	Building up mountains and types of mountains
12th week	Plate tectonics, Earthquake, faults, types of faults
13th week	Plate tectonics, Earthquake, faults, types of faults
14th week	Plate tectonics, Earthquake, faults, types of faults
15thweek	**FINAL EXAM**

Presentation methods and techniques

Methods of teaching varied according to the type of text, student and situation. The following techniques are usually used:

1- Problem solving.

2- Discussion.

3- Learning by activities.

4- Connecting students with different sources of information

Sources of information and Instructional Aids

- Computer … power point …etc.
- Library sources

Assessment Strategy and its tools

The assigned syllabus is assessed and evaluated
Through: feed back and the skills that are acquired by the students

The tools:

1- Digonistic tests to identify the students level and areas of weakness
2- Formal (stage) evaluation
   a) Class Participation
   b) Ist Exam
   c) 2nd Exam
   d) Activity file

Tool & Evaluation

Tests are permanent tools & assessment, in addition to the activity file which contains curricular and the co-cussiculor activities, research, report papers and the active participation of the student in the lecture.

The following table clarifies the organization of the assessment schedule:

Test	Date	Grade
First Exam		20
2nd Exam		20
attendance		20
Final Exam		40

Activities and Instructional Assignment

1- Practical assignments to achieve the syllabus objectives.

Regulations to maintain the teaching-Learning Process in the Lecture:

1- Regular attendance.

2- Respect of commencement and ending of the lecture time.

3- Positive relationship between student and teacher.

4- Commitment to present assignments on time.

5- High commitment during the lecture to avoid any kind of disturbance and distortion.

6- High seuse of trust and sincerity when referring to any piece of information and to mention the source.

7- The student who absents himself should submit an accepted excuse.

8- University relevant regulations should be applied in case the studen,s behavior is not accepted.

9- Allowed Absence percentages is (%).

Internet websites

References:

1. Engineering Geology, second edition, Perry H. Rahn

2. Structural Geology, Robert J. Twiss and Eldridge M. Moores

Syllabus Classification

Objectives	***Learning outcome***	***Assessment tools***
1-		
2-		
3-		
4-		
5-		