# **Course Description Form**

### 1. Course Name:

Soil Mechanics

2. Course Code:

WCV-31-02

3. Semester / Year:

2<sup>nd</sup> Semester/ 2024

4. Description Preparation Date:

18/3/2024

5. Available Attendance Forms:

In-person classes

6. Number of Credit Hours (Total) / Number of Units (Total)

5 hrs.

3 units

7. Course administrator's name (mention all, if more than one name)

Name: Lecturer Dr. Mustafa Al-saedi

Email: Mustafa.al@uowa.edu.iq

### 8. Course Objectives

#### **Course Objectives**

- ✓ Studying the seepage behavior under the hydraulic structures
- ✓ Calculate the stresses under the geostatic and structural loading
- ✓ Determine the strength of soils and its parameters
- ✓ Estimating the different types of settlement under the stresses

#### 9. Teaching and Learning Strategies

### Strategy

✓ Videos and photted reports about the objectives are the fast and easy strategy to reach the information about the foundation problems and soil behavior.

#### 10. Course Structure

Week	Hr	Required Learning	Unit or	Learning	Evaluation method
	s	Outcomes	subject	method	
			name		
1-4	15	Learning the seepage under hydraulic structures such as dam	Two-Dimensiona Flow	Class& laboratory	Laboratory reports, daily monthly exams

5-7	15	Studying the stresses above soil's layers	Stress in a soil mass	Class& laboratory	Laboratory reports, daily monthly exams
8-11	15	Estimating the different types settlement under the effect stresses	Compressibilit y of Soil	Class& laboratory	Laboratory reports, daily monthly exams
12-14	15	Determine the Shear Strength of Soil and its parameters	Shear Strength of Soil	Class& laboratory	Laboratory reports, daily monthly exams
15	15	Review of the above study	all.		

### 11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	✓ Soil Mechanics R.F.Graig			
GITY ECE OF E	✓ Soil Mechanics T.W.Lamb.R.V.Whitman			
LE ON O	✓ Soil Mechanics Basic Concepts and			
3 ~~	Engineering Application. A.Aysen			
	O P			
Main references (sources)	✓ Advanced Soi <mark>l</mark> Mechanics, Das			
	✓ Soil Mechanics Fundamentals			
Recommended books and references (scientific				
journals, reports)				
Electronic References, Websites	Google schooler; YouTube			
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