

## Course Description Form

<b>1. Course Name:</b>					
Soil Mechanics					
<b>2. Course Code:</b>					
<b>3. Semester / Year:</b>					
2 <sup>nd</sup> Semester/ 2024					
<b>4. Description Preparation Date:</b>					
18/3/2024					
<b>5. Available Attendance Forms:</b>					
In-person classes					
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>					
75 hrs					
<b>7. Course administrator's name (mention all, if more than one name)</b>					
Name: Lecturer Dr. Mustafa Al-saedi Email: Mustafa.al@uowa.edu.iq					
<b>8. Course Objectives</b>					
<b>Course Objectives</b>		<ul style="list-style-type: none"> <li>✓ Studying the seepage behavior under the hydraulic structures</li> <li>✓ Calculate the stresses under the geostatic and structural loading</li> <li>✓ Determine the strength of soils and its parameters</li> <li>✓ Estimating the different types of settlement under the stresses</li> </ul>			
<b>9. Teaching and Learning Strategies</b>					
<b>Strategy</b>		✓ Videos and photted reports about the objectives are the fast and easy strategy to reach the information about the foundation problems and soil behavior.			
<b>10. Course Structure</b>					
<b>Week</b>	<b>Hr s</b>	<b>Required Learning Outcomes</b>	<b>Unit or subject name</b>	<b>Learning method</b>	<b>Evaluation method</b>
1-4	15	Learning the seepage under hydraulic structures such as dam	Two-Dimensional 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	Compressibility 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			

### 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)	<ul style="list-style-type: none"> <li>✓ Soil Mechanics R.F.Graig</li> <li>✓ Soil Mechanics T.W.Lamb.R.V.Whitman</li> <li>✓ Soil Mechanics Basic Concepts and Engineering Application. A.Aysen</li> </ul>
Main references (sources)	<ul style="list-style-type: none"> <li>✓ Advanced Soil Mechanics, Das</li> <li>✓ Soil Mechanics Fundamentals</li> </ul>
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Google scholar; YouTube

