MEHRAN UNIUVERSITY OF ENGINEERING AND TECHNOLOGY

TENTATIVE TEACHING PLAN

DEPARTMENT/INSTITUTE/DIRECTORATE: CIVIL ENGINEERING

Name of Teacher: **Engr. Samar Hussain Rizvi/Engr. Umair Hussain/Engr. Abdul Latif**

Subject: **Soil Mechanics (Practical)** Course Code: **CE326**

Batch: **21CE (A+B+C+D)** Year: **3rd** Semester: **6th**

Semester Starting Date: **15-07-2024** Semester Suspension Date:06-11-2024

Course Learning Outcomes (CLOs):

Upon successful completion of the course, the student will be able to:

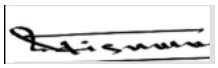
CLO No.	Description	Taxonomy level	Linking to PLO
3	**PRACTICE** laboratory testing to determine index properties of soil, flow of water through soil and consolidation parameters of soil	P3	4

Sr. #	Description of Topic	No. of practical hours. Required
1	Introduction to the Soil Mechanics Laboratory and HSE (Health, Safety and Environment) measures.	3
2	Collection of soil samples from field and to prepare the representative soil sample for laboratory testing: a). Quartering Method b). Riffle Box Method	3
3	To determine the water content of soil sample by: a). Oven Drying Method b). Hot Plate Method c). Sand Bath Method d). Speedy Moisture Tester e). Infrared Moisture Tester	3
4	To determine the particle size distribution of coarse-grained soil by Sieve Analysis.	3
5	To determine the particle size distribution of fine-grained soil by Hydrometer Analysis.	3
6	To determine the liquid limit of fine-grained soil by Casagrande Apparatus	3
7	To determine the liquid limit of fine-grained soil by Fall Cone (Penetrometer) Method.	3
8	To determine the plastic limit of the fine-grained soil by Glass Plate.	3
9	To determine the shrinkage limit of fine-grained soil.	3
10	To determine the specific gravity of fine-grained soil by Density Bottle Method.	3
11	To determine the coefficient of permeability of coarse-grained soil by Constant Head Method.	3
12	To determine the coefficient of permeability of fine-grained soil by Falling Head Method.	3

13	To determine consolidation parameters of saturated fine-grained soil by One Dimensional Consolidation Test.	6
14	To determine free swell of clayey soils.	3
15	To perform Open ended lab.	3
	Total	48

Signature of Teacher: Dated: 06-09-2024

Remarks of DMRC: APPROVED

Signature of Chairman:  Dated: 18-09-2024