MEHRAN UNIVERSITY OF ENGINEERING & TECHNOLOGY

DEPARTMENT/INSTITUTE/DIRECTORATE: **CIVIL ENGINEERING**

TENTATIVE TEACHING PLAN (PRACTICAL)

Name of Teacher: Prof. Dr. Ashfaque Pathan /Engr. Abdul Latif Soomro
Batch: 20CE (A+B+C+D)   **Year:** Third **Semester:** 6th

Subject: Environmental Engineering-I   **Course Code:** CE351

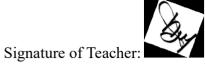**Semester Starting Date:** 03-07-2023   **Semester Suspension Date:** 20-10-2023

Course learning outcomes:
After completion of the "Environmental Engineering-I" course, each student will be able to:

CLO No.	Description	Taxonomy Level	Associated PLOs
3	PRACTICE various laboratory and filed test to obtain physical, chemical and biological properties of water	P3	4

Course Contents

S. #	TOPICS	CLO's	Lecture Required
1.	Introduction of Environmental Engineering lab and HSE measures	3	**03**
2.	Sample preparation techniques including Dilution Filtration/Centrifugation, Solid phase extraction, Digestion and Distillation.	3	**03**
3.	To determine the Turbidity contents of given sample of water	3	**03**
4.	To determine the Suspended Solids/Non-filterable residue in sample of water	3	**03**
5.	To prepare different water samples of varying pH and Total Dissolved Solids (TDS) and to determine pH, TDS and electrical Conductivity (EC) of prepared water samples	3	**06**
6.	To determine the Taste and Odour value of given water sample	3	**03**
7.	To determine the Acidity of given sample of water	3	**03**
8.	To determine the Alkalinity of given sample of water	3	**03**
9.	To determine the Hardness of given sample of water	3	**03**
10.	To determine the Chloride Concentration in given sample of water	3	**03**
11.	To determine the Sulphates in given sample of water	3	**03**
12.	To determine the Total Chlorine Concentration in given sample of water	3	**03**
13.	Determination of Jar Test (Alum dose selection) for turbid water	3	**03**
14.	Determination of Dissolved Oxygen (D.O)	3	**03**
15.	Open ended Lab	3	**03**
	TOTAL	-	**48**

Signature of Teacher: Dated: 21-06-2023

Remarks by DMRC: APPROVED

Signature of Chairman: Dated: 01/08/2023