



MEHRAN UNIVERSITY OF ENGINEERING & TECHNOLOGY

FRM-001/00QSP-004

Dec.01.2001

DEPARTMENT/INSTITUTE/DIRECTORATE: CIVIL ENGINEERING TENTATIVE TEACHING PLAN (PRACTICAL)

Name of Teacher: Prof. Dr. Ashfaque Pathan /Engr. Abdul Latif Soomro

Subject: Environmental Engineering-I (Practical) **Course Code:** CE351

Batch: 21CE (A+B+C+D)

Year: Third **Semester:** 6th

Semester Starting Date: 15-07-2024

Semester Suspension Date: 06-11-2024

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 field tests to obtain physical, chemical and biological properties of water. | P3 | 4 |

Course Contents

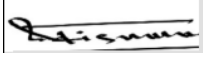
| S. # | TOPICS | CLO's | Lecture Required |
|------|---|-------|------------------|
| 1. | Introduction of Environmental Engineering lab and HSE measures | 3 | 03 |
| 2. | Sample preparation techniques including Dilution, Filtration/Centrifugation, Solid phase extraction, Digestion and Distillation | 3 | 06 |
| 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 | 03 |
| 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. | To perform Open Ended Lab | 3 | 03 |
| | TOTAL | - | 48 |



Signature of Teacher:

Dated: 06-09-2024

Remarks by DMRC: **APPROVED**

Signature of Chairman: 

Dated: 18-09-2024