



FRM-001/00QSP-004

Dec.01.2001

TENTATIVE TEACHING PLAN

DEPARTMENT/INSTITUTE/DIRECTORATE: CIVIL ENGINEERING

Department:	Civil Engineeri	ng				
Name of Teacher:	Engr. Abdul Qudoos Malano					
Subject:	Environmental Engineering I		Course Code:	CE351		
Batch:	20 CE (D)	Year: 3 rd	Semester:	6 th		
Semester Starting Date	e: 03-07-2023		Semester Suspensio	on Date: 20-10-2023		

Course Learning Outcomes (CLOs): Upon successful completion of the course, the student will be able to:

CLO No.	Description	Taxonomy Level	Linking to PLOs
1	DESCRIBE the characteristics of potable water used in daily life, environmental legislations and management.	C2	1
2	EVALUATE the water treatment plant unit and water distribution networks.	C5	4

S. #	TOPICS		No. of Lecture Required
Introduction to Environmental Engineering			
1.	Introduction of the subject, importance in civil Engineering		1
Envi	Environmental Legislation and Management		
2.	Environmental issues in urban and rural areas, sustainable environment, role of agencies to prevent degradation		1
3.	National Environmental Quality Standards (NEQS).and Environmental Impact Assessment (EIA).	1	2
Water Quality			
4.	Hydrologic Cycle and Sampling methods	1	1
5.	Water characteristics	1	1
6.	Water quality analysis and monitoring	1	1
Water Supply Engineering:			
7.	Water Demand and its types	1	1
8.	Estimation water demand	1	1
9.	Problems on water demand	1	1
10.	Factors affecting water use	1	1
11.	Design period and factors affecting the design period	1	2
12.	Population forecast and its methods	1	2
13.	Water sources	1	1
Water Treatment Unit Processes / Operations:			
14.	Water treatment methods	2	1
15.	Screening	2	1
16.	Sedimentation, Coagulation and filtration	2	1
17.	Disinfection and water softening	2	1
18.	Special water Treatment methods	2	1

Water Distribution				
19.	Water supply systems and distribution methods2			1
20.	Requirements of a good distribution system2			1
Water Supply Projects and Water Collection:				
21.	Planning of water supply projects and its importance and necessity 2			1
22.	Data to be collected, data analysis, project drawing and estimate			1
23.	Water collection methods			1
24.	Intake and its types	2		1
25.	5. Factors affecting intakes and design of intakes			1
Water Conveyance				
26.	Conduit and its types 2			1
27.	. Pumps and its types			1
28.	Design of pumping stations 2			1
Design of Water Treatment Plant				
29.	Design of various units of treatment plant	2		1
	TOTAL			32

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Signature of Teacher:

Dated: 03/07/2023

Remarks by DMRC: **APPROVED**

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Signature of Chairman:

Dated: 01/08/2023