



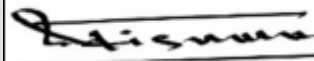


MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY JAMSHORO

Department of Civil Engineering

LESSON PLAN

COURSE TITLE: Reinforced and Pre-Stressed Concrete		COURSE CODE: CET302	CREDIT HOURS: 02	MINIMUM CONTACT HOURS: 32
COURSE INSTRUCTOR: Engr. Samar Hussain Rizvi / Engr. Muhammad Shaheer				
Batch: 22BSCET	Semester: 5 th	Semester Starting Date: 09-12-2024	Semester Suspension Date: 18-04-2025	
COURSE LEARNING OUTCOMES:				
CLO No.	Description	Taxonomy level	Associated PLO	
1	Describe basic knowledge on design of reinforced and pre-stressed concrete structural members	C2	1	
2	Apply design method for design of reinforced and pre-stressed concrete members using different codes	C4	3	
LESSON CONTENTS AND ASSOCIATED CLO(s)				
Contents	CLO No.	Marks Assigned	Delivery Methods	Assessment Methods (Marks)
<ul style="list-style-type: none">Introduction to RPC<ul style="list-style-type: none">Basic PrinciplesDesign CodeUltimate Strength DesignUnder Reinforced and Over ReinforcedForm WorkShutteringShoring and ScaffoldingShear Stress in concrete beams<ul style="list-style-type: none">Shear CrackingWeb ReinforcementTension ReinforcingDrawing of Structural Elements<ul style="list-style-type: none">Design of Bar BendingPreparation for Working DrawingBar bending Schedule <p>No. of Lectures: 15</p>	1	23	<ul style="list-style-type: none">Class LectureDiscussion	<ul style="list-style-type: none">Assignment (08)Mid semester Exam (15)
<ul style="list-style-type: none">Prestressed Concrete<ul style="list-style-type: none">Basic Concept of prestressingMethod of PrestressingApplication of Prestressed ConcreteAnalysis of prestressed concrete<ul style="list-style-type: none">Load balancing conceptShort term and long-term deflectionLosses of prestressLump sum and detailed estimation of prestressed lossesPrecast unitCasting and curing of units <p>No. of Lectures: 17</p>	2	27	<ul style="list-style-type: none">Class LectureDiscussion	Class Test (07) Final Exam (20)
ASSESSMENT DETAILS				

S. No.	Assessment Activities	Marks	Activities		CLO(s) to be assessed
1	Test/Assignment	15	Assignment(s)	1	1
			Class Tests	1	2
2	Mid Semester Exam	15	1		1
3	Final Semester Exam	20	1		2
Prepared by: Engr. Muhammad Shaheer  Signature: Dated: 18-12-2024		Reviewed by: Curriculum Review Committee  Signature: Dated: 20-12-2024		Approved by: Chairman, CED  Signature: Dated: 20-12-2024	