MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY JAMSHORO

Department of Civil Engineering

LESSON PLAN

COURSE TITLE: **Structural Design and Drawing**	COURSE CODE: **CE406**	CREDIT HOURS: **03**	MINIMUM CONTACT HOURS: **48**
COURSE INSTRUCTER: **Prof. Dr. Fareed Ahmed Memon (A) /Engr. Azizullah Jamali (B+C)**			
Batch: **21CE**	Semester: **7th**	Semester Starting Date: **09-12-2024**	Semester Suspension Date: **18-04-2025**

COURSE LEARNING OUTCOMES:

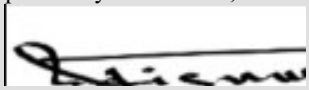
CLO No.	Description	Taxonomy level	Associated PLO
1	DESIGN various reinforced concrete structural members.	C6	3
2	DISCUSS design requirements and techniques of RCC bridges and Tall buildings.	C2	3

LESSON CONTENTS AND ASSOCIATED CLO(s)

Contents	CLO No.	Marks Assigned	Delivery Methods	Assessment Methods (Marks)
• **DESIGN OF REINFORCED CONCRETE MEMBERS:** - Slender columns, design considerations - Analysis and design of slender columns - Shear walls, advantage of shear walls, design considerations - Analysis and design of shear walls - Two-way slabs, types of two-way slabs - Methods for the design of two-way slabs - Analysis and design of two-way slabs - Flat plate and flat slabs - Design of flat plate and flat slabs - Waffle slabs, design of waffle slabs - Retaining walls, types of retaining walls, analysis and design of retaining walls - Water tanks, types of water tanks, design of water tanks ➢ **No. of lectures required: 36**	**1**	**75**	• Class Lecture • Discussion • Design practice	• Mid semester Exam (30) • Assignment-I (05) • Assignment-II (05) • Class test-I (05) • Class test-II (05) • Final Exam (25)
• **PRELIMINARY DESIGN OF RCC BRIDGES AND TALL BUILDINGS:** - Bridges, types of bridges, preliminary design of RCC bridges - Seismic design of RCC structures, design consider-ations - High rise buildings, design considerations for high-rise buildings ➢ **No. of lectures required: 12**	**2**	**25**	• Class Lecture • Discussion • Design practice	• Assignment-III (05) • Class test-III (05) • Final Exam (15)

ASSESSMENT DETAILS

S. No.	Assessment Activities	Marks	Activities		CLO(s) to be assessed
1	Class Test/Assignment/Project Design/ Presentation/Quiz/Field Report	**30**	Class test(s)	03	1,2
			Assignment(s)	03	1,2
2	Mid Semester Exam	**30**	1		1
3	Final Semester Exam	**40**	1		1, 2

Prepared by: **Prof. Dr. Fareed A. Memon** Signature:  Dated: 05.12.2024	Reviewed by: **Curriculum Review Committee**  Signature: Dated: 20-12-2024	Approved by: **Chairman, CED**  Signature: Dated: 20-12-2024