

## MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY JAMSHORO Department of Civil Engineering

## LESSON PLAN

COURSE TITLE: Mechanics of Solids-II COUCE2				COURSE CO CE251	DDE:	CREI HOU	CREDIT HOURS: <b>03</b>		MINIMUM CONTACT HOURS: 48		
С	COURSE INSTRUCTER: Dr. Muhammad Rehan Hakro (A)/Engr. Ali Raza Lashari (B+C)										
Batch: 23CE Semester: 4 <sup>th</sup> Semester Starting Dat				ng Date: 09-12	-2024	Semester Suspension Date:18-04-2024				18-04-2024	
С	COURSE LEARNING OUTCOMES:										
	CLO No.	Description							Taxonomy level		Associated PLO
	1	UNDERSTAND plane stress and strain in the member various loading conditions				mbers subjected to			C2		1
	2	ANALYZE the horizontal shear stress / force in thin-walled sections and circular sections within the elastic limits, and describe unsymmetrical bending, curved beams, theories of failure, creep, fatigue and inelastic materialsC42									
L	LESSON CONTENTS AND ASSOCIATED CLO(s)										
	Contents				Mor	70	Delivery As Methods Meth		ssessment ods (Marks)		
			Contents		No.	Assign	ned	Metho	ods	Meth	ods (Marks)
_	• Str	ess and s	Contents Strain during Ge	eneral Loadings	No.	Assign	ned	Metho	ods	Metho	ods (Marks)
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<ul> <li>Horizontal Shear Stress / Force:         <ul> <li>Horizontal shear stress in beams</li> <li>Stress in built-up beams</li> <li>Shear Flow and Shear center</li> </ul> </li> </ul>	2	50		
<ul> <li>General Topics:</li> <li>Unsymmetrical bending</li> <li>Analysis of curved beams</li> <li>Theories of Failure</li> <li>Creep and Fatigue fracture</li> <li>Introduction to inelastic materials</li> <li>Limit torque</li> <li>Limit moment</li> <li>Position of neutral axis</li> <li>Residual stresses</li> <li>No. of lectures Required : 24</li> </ul>			<ul> <li>Class Lecture</li> <li>Discussion</li> <li>Design practice</li> </ul>	<ul> <li>Final Exam (40)</li> <li>Class Tests II (05)</li> <li>Assignment-II (05)</li> </ul>

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	1	Class Test/Assignment		30	Assignment(s)	02	1 and 2
					Class Test(s)	02	1 and 2
4	2	Mid Semester Exam		30	1		1
	3	Final Semester Exam		40	1		2

	Reviewed by: Curriculum Review Committee	Approved by: Chairman, CED
Prepared by: <b>Dr. Muhammad Rehan</b>	P.	Deignan
	Signature:	Signature:
Signature: Dated: 18-12-2024	Dated: 20-12-2024	Dated: 20-12-2024