

## Lesson Plan

Subject : SD-II (Code):TH.2      Name of faculty: Fr. Saaleg Khatun      Semester :5<sup>th</sup>

Class allotted :60p

Branch :Civil Engg.

Session:2024(W)

Discipline	Semester	From date: 01/07/2024 To date:26/10/2024	Teaching Aid
Subject:	No. of days/ per week:4 days/week	Theory/ Practical –Topics/Lesson	
Week	Date/Period		
1	01/07/2024 TO 06/07/2024	<b>1 Introduction</b> : 1.1 Common steel structures, Advantages & disadvantages of steel structures. 1.2 Types of steel, properties of structural steel. 1.3 Rolled steel sections, special considerations in steel design	White board & marker
2	08/07/2024 TO 13/07/2024	1.4 Loads and load combinations. 1.5 Structural analysis and design philosophy. 1.6 Brief review of Principles of Limit State design.	White board & marker
3	15/07/2024 TO 20/07/2024	<b>2 Structural Steel Fasteners and Connections</b> . 2.1 Bolted Connections 2.1.1 Classification of bolts, advantages and disadvantages of bolted connections.	White board & marker & Smart board
4	22/07/2024 TO 27/07/2024	2.1.2 Different terminology, spacing and edge distance of bolt holes. 2.1.3 Types of bolted connections. 2.1.4 Types of action of fasteners, assumptions and principles of design	White board & marker
5	29/07/2024 TO 03/08/2024	2.1.5 Strength of plates in a joint, strength of bearing type bolts (shear capacity& bearing capacity), reduction factors, and shear capacity of HSFGB bolts. 2.1.6 Analysis & design of Joints using bearing type and HSFGB bolts (except eccentric load and prying forces)	White board & marker
6	05/08/2024 TO 10/08/2024	2.1.7 Efficiency of a joint. 2.2 Welded Connections: 2.2.1 Advantages and Disadvantages of welded connection	White board & marker
7	12/08/2024 TO 17/08/2024	2.2.2 Types of welded joints and specifications for welding 2.2.3 Design stresses in welds. 2.2.4 Strength of welded joints.	White board & marker & Smart board

  
Signature of HOD

Saaleg Khatun  
Signature of faculty

Week	Date/Period	Theory/ Practical –Topics/Lesson	Teaching Aid
8	20/08/2024 TO 24/08/2024	<b>3 Design of Steel tension Members</b> 3.1 Common shapes of tension members.	White board & marker
9	27/08/2024 TO 31/08/2024	3.2 Maximum values of effective slenderness ratio. 3.4 Analysis and Design of tension members.( Considering strength only and concept of block shear failure.)	White board & marker
10	02/09/2024 TO 06/09/2024	<b>4 Design of Steel Compression members.</b> 4.1 Common shapes of compression members. 4.2 Buckling class of cross sections, slenderness ratio	White board & marker
11	09/09/2024 TO 14/09/2024	4.3 Design compressive stress and strength of compression members. 4.4 Analysis and Design of compression members (axial load only)	White board & marker & Smart board
12	17/09/2024 TO 21/09/2024	<b>5 Design of Steel beams</b> : 5.1 Common cross sections and their classification. 5.2 Deflection limits, web buckling and web crippling.	White board & marker
13	23/09/2024 TO 28/09/2024	5.3 Design of laterally supported beams against bending and shear  . <b>6 Design of Tubular Steel Structures:</b> 6.1 Round Tubular Sections, Permissible Stresses	White board & marker & Smart board
14	30/09/2024 TO 05/10/2024	6.2 Tubular Compression & Tension Members 6.3 Joints in Tubular trusses	White board & marker
15	07/10/2024 TO 09/10/2024	<b>7 Design of Masonry Structures:</b> 7.1 Design considerations for Masonry walls & Columns, Load Bearing & Non-Load Bearing walls, Permissible stresses, Slenderness Ratio, Effective Length, Height & Thickness.	White board & marker

  
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Week	Date/Period	Theory/ Practical –Topics/Lesson	Teaching Aid
16	17/10/2024 TO 19/10/2024	7 Design of Masonry Structures: 7.1 Design considerations for Masonry walls & Columns, Load Bearing & Non-Load Bearing walls, Permissible stresses, Slenderness Ratio, Effective Length, Height & Thickness.	White board & marker & Smart board
17	21/10/2024 TO 26/10/2024	7 Design of Masonry Structures: 7.1 Design considerations for Masonry walls & Columns, Load Bearing & Non-Load Bearing walls, Permissible stresses, Slenderness Ratio, Effective Length, Height & Thickness.	White board & marker
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Sadeeq Kheir