

Lesson Planning

Name of Faculty : Sh. Sunny Brar & Sh. Sumit Kumar
Dicipline : Mechanical Engg.
Subject : Mechanical Engineering Drawing I
Lesson Plan duration : 15 Weeks
Work load (Lecture/Practical) per week (in hours): 6 Lab/Week

Week	Theory		Date	Remarks
		Topic(Including assignment/test)		
1		UNIT - 01 Detail and Assembly Drawing		
	1	Principle and utility of detail and assembly drawings, Practical exercise on drawing from detail to assembly or vice versa using different wooden joints as example (lap joint – T joint)		
	2	Corner joint, Mortise and tenon joint, Bridle joint, Mitre faced corner joint)		
		UNIT - 02 Threads		
2	3	Nomenclature of threads, types of threads, Single and multiple start threads,		
	4	Right hand and left hand thread, Forms of various external thread sections such as V thread (Metric thread, British associate)		
3	5	American thread, Basic whitworth thread), Square, Acme, Knuckle, and		
	6	Buttress thread, Simplified conventional representation of V thread.		
		UNIT - 03 Nuts and Bolts		
4	7	Different views of hexagonal and square headed nuts and bolts		
	8	Assembled view of nuts and bolts with washers, Foundation bolt- Rag bolt,		
5	9	Hook bolt., Lewis bolt		
	10	Eye bolt and curved bolt (Free hand)		
		UNIT - 04, Locking Devices		
6	11	Locking nuts - Castle nut, Sawn nut, and Split pin lock nut.		
	12	Locking by spring washers, Locking plates.		
		UNIT - 05, Screws, Studs and Washers		
7	13	Drawing of various types of machine and set screws, Drawing of various types of studs,		
	14	Through bolt, tap bolt and stud bolt.		

8		UNIT - 06, Keys and Cotters		
	15	Various types of keys and their application, Preparation of drawings of various keys and cotters.		
	16	Various types of joints (a) Gib and Cotter joint		
9	17	(b) Knuckle joint		
	18	(c) Spigot and Socket joint		
10		UNIT - 07, Rivets and Riveted Joints		
	19	Types of general purpose rivet heads (Snap Head, Pan Head , Flat and counter sunk).		
	20	Types of riveted joints – lap (single and double riveted),		
11	21	butt (single cover plate) and double cover plate),		
	22	Butt Joint chain and zig-zag riveting (Double riveted)		
	23	Lap Joint chain and zig-zag riveting (Double riveted)		
	24	Caulking and fullering operation of riveted joints		
13		UNIT - 08, Shaft Coupling		
	25	Introduction to coupling, their uses and types,		
	26	Muff Coupling,		
14	27	Protected type flange coupling.		
	28	Flexible or non-rigid coupling		
15		UNIT - 09, Computer Aided Drafting (CAD)		
	29	Introduction, Various 2 D commands – Draw, modify and option commands,		
	30	Prepare at least 4 sheets using CAD software – one drawing each from wooden joint, , threads, nut and bolts, coupling		