

GOVT. POLYTECHNIC JAJPUR  
A/P-Ragadi,Block-Korei,Dist- Jajpur,Odisha-755019

LESSION PLAN

Name of the Faculty		Er. Saroj Kumar Mishra
Discipline		Mechanical Engineering
Semester:		1st
Subject:		ENGINEERING DRAWING
Commencement of Classes		25/10/2022-31/01/2023
No. of Days/Week class allotted		3
Lesson Plan Duration:		42 Days
Week	Practical Day	Topic
Week1	D1	<b>Unit 1:Introduction to Engineering drawing</b>
		1.1 Definition of engineering drawing, introduction to drawing instruments,materials,layout and sizes of drawing sheets and boards
	D2	1.2Engineering graph book, different grades of pencils to be used 1.3 lying of drawing sheet,margin,standard layout,title block,folding principle
Week2	D1	<b>Unit2: Types of Lines,Lettering &amp; Dimensioning</b>
		2.1Demonstrate and explain the use of various types of lines. 2.2 single stroke lettering,gothic Lettering & nemerals as per BIS
	D2	<b>Unit3: Scales</b>
		3.1 Scales-their needs and importances,types of scales,R.F, length of scales
		3.2 Construction of plain scales
D3	3.3 Construction of diagonal scales	
Week3	D1	<b>Unit4: Curves</b>
		4.1 Explain conic section and various terms 4.2 eccentricity method ( Ellipse)
	D2	4.2 eccentricity method (parabola,hyperbola)
	D3	4.3 concentric circle method and arc of circle method
Week4	D1	4.4 rectangle method,Tangent method
	D2	<b>Unit5: Orthographic Projections</b>
		5.1 1st angle and 3rd angle projection 5.2 projection of points
D3	5.3 projection of straight line	
Week5	D1	5.3 projection of straight line
	D2	5.4 draw plane figure such as squares,rectangles
	D3	5.4 triangles,circle
Week6	D1	5.4 Pentagon and Hexagon
	D2	5.5 projection of solids such as prism,cylinder
	D3	5.5 cone,tetrahedron
Week7	D1	5.5 Pyramid
	D2	Revision and test
	D3	<b>Unit6: Section &amp; Develoments</b>

Week8	D1	6.1 sectional projection &development of Prism
	D2	6.1 sectional projection &development of Prism
	D3	6.1 sectional projection &development of cylinder
Week9	D1	6.1 sectional projection &development of cylinder
	D2	6.1 sectional projection &development of cone
	D3	6.1 sectional projection &development of cone
Week10	D1	6.1 sectional projection &development of pyramid
	D2	6.1 sectional projection &development of pyramid
	D3	6.2 true shape of cutting sections
Week11	D1	6.2 true shape of cutting sections
	D2	<b>Unit7: Isometric Projections</b> 7. Fundamentals of isometric projections and isometric scale
	D3	7. Isometric views andprojection of regular solids- cylinder,cone with axis vertical
Week12	D1	7. Isometric views andprojection of regular solids- cylinder,cone with axis horizontal
	D2	7. Isometric views andprojection of regular solids- prism,pyramid
	D3	<b>Unit 8: Building Drawing</b>
Week13	D1	8.1 various components of building and their sizes
	D2	8.2 drawing plan of single room building with verendah
	D3	8.2 drawing elevation
Week14	D1	<b>Unit 9: Practices On Autocaad</b> 9.1 settings,limits,units
		9.2 commands of line, circle, polygon, ellipse, rectangle, edit, dimension, modify commands
	D2	9.3.1 Orthographic projections of lines using Autocaad
	D3	9.3.1 Orthographic projections of planes using Autocaad
		9.3.1 Orthographic projections of solid using Autocaad
Week15	D1	9.3.2 Isometric projection cone ,cylinder,prism,pyramid.

Saroj ku. Mishra

Signature of Faculty