

**GOVERNMENT POLYTECHNIC JAJPUR**

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**DEPARTMENT OF MECHANICAL ENGINEERING**

**LESSON PLAN**

<b>Discipline: Mechanical</b>	<b>Semester: 5th</b>	<b>Name of the Teaching faculty: Suprava Behera</b>
<b>Subject: CAD/CAM(Pr3)</b>	<b>No of Days/Week class allotted: 4</b>	<b>Semester from Date:15.09.2022 To Date:22.12.2022 No of weeks: 15</b>
<b>Week</b>	<b>Class Day</b>	<b>Topics</b>
<b>1st</b>	1st (Gr 1)(2p)	Introduction to CAD& CAM
	1st (Gr 2)(2p)	Introduction to CAD& CAM
	2nd (Gr 1)(2p)	Fundamental of CAD
	2nd (Gr 2)(2p)	Fundamental of CAD
<b>2nd</b>	1st (Gr 1)(2p)	Setting units, sheet size, limits etc.
	1st (Gr 2)(2p)	Setting units, sheet size, limits etc.
	2nd (Gr 1)(2p)	2D Drafting: Auto CAD Software over view.
	2nd (Gr 2)(2p)	2D Drafting: Auto CAD Software over view.
<b>3rd</b>	1st (Gr 1)(2p)	Use of draw tool Bar
	1st (Gr 2)(2p)	Use of draw tool Bar
	2nd (Gr 1)(2p)	Use of Modify tool Bar
	2nd (Gr 2)(2p)	Use of Modify tool Bar
<b>4th</b>	1st (Gr 1)(2p)	Create Rectangle, circle, polygon
	1st (Gr 2)(2p)	Create Rectangle, circle, polygon
	2nd (Gr 1)(2p)	Various methods to draw circle
	2nd (Gr 2)(2p)	Various methods to draw circle
<b>5th</b>	1st (Gr 1)(2p)	Various methods to draw a rectangle
	1st (Gr 2)(2p)	Various methods to draw a rectangle
	2nd (Gr 1)(2p)	Drawing Circle by two point method
	2nd (Gr 2)(2p)	Drawing Circle by two point method
<b>6th</b>	1st (Gr 1)(2p)	Drawing Circle by three point method
	1st (Gr 2)(2p)	Drawing Circle by three point method
	2nd(Gr 1)(2p)	Drawing Circle by TAN TAN Radius method
	2nd (Gr 2)(2p)	Drawing Circle by TAN TAN Radius method
<b>7th</b>	1st (Gr 1)(2p)	Drawing of pentagon hexagon, octagon etc
	1st (Gr 2)(2p)	Drawing of pentagon hexagon, octagon etc
	2nd (Gr 1)(2p)	Different methods of dimentioning
	2nd (Gr 2)(2p)	Different methods of dimentioning
	1st (Gr 1)(2p)	Editing of polygon

8th	1st (Gr 2)(2p)	Editing of polygon
	2nd (Gr 1)(2p)	Commands essential for creating 2D drawing
	2nd (Gr 2)(2p)	Commands essential for creating 2D drawing
9th	1st (Gr 1)(2p)	Different methods of dimensioning
	1st (Gr 2)(2p)	Different methods of dimensioning
	2nd (Gr 1)(2p)	Modification commands like trim, extend ,hatching explode and region etc
	2nd (Gr 2)(2p)	Modification commands like trim, extend ,hatching explode and region etc
10th	1st (Gr 1)(2p)	Create various drawing views of the 3-D parts.
	1st (Gr 2)(2p)	Create various drawing views of the 3-D parts.
	2nd (Gr 1)(2p)	3D drafting, use of UCS & WCS
	2nd (Gr 2)(2p)	3D drafting, use of UCS & WCS
11th	1st (Gr 1)(2p)	Extrude the face / plane to get 3-D views.
	1st (Gr 2)(2p)	Extrude the face / plane to get 3-D views.
	2nd (Gr 1)(2p)	3 D Drawings of Gib and cutter joint
	2nd (Gr 2)(2p)	3 D Drawings of Gib and cutter joint
12th	1st (Gr 1)(2p)	3 D Drawings of Screw Jack
	1st (Gr 2)(2p)	3 D Drawings of Screw Jack
	1st (Gr 1)(2p)	3 D Drawings of Connecting Rod
	1st (Gr 2)(2p)	3 D Drawings of Connecting Rod
13th	1st (Gr 1)(2p)	3 D Drawings of Bearing Block
	1st (Gr 2)(2p)	3 D Drawings of Bearing Block
	1st (Gr 1)(2p)	Study of CNC lathe, milling(G-CODE.M-code)
	1st (Gr 2)(2p)	Study of CNC lathe, milling(G-CODE.M-code)
14th	1st (Gr 1)(2p)	Format –Dimensioning methods,Programme writing Turning Simulator-Milling simulator IS practice-commands menus
	1st (Gr 2)(2p)	Format –Dimensioning methods,Programme writing Turning Simulator-Milling simulator IS practice-commands menus
	1st (Gr 1)(2p)	Editing the programme in the CNC MACHINES.
	1st (Gr 2)(2p)	Editing the programme in the CNC MACHINES.
15th	1st (Gr 1)(2p)	Execute the programme in the CNC machines
	1st (Gr 2)(2p)	Execute the programme in the CNC machines
	1st (Gr 1)(2p)	Review,Sessional,record checking
	1st (Gr 2)(2p)	Review,Sessional,record checking

**Signature of the faculty**