GOVERNMENT CO.ED POLYTECHNIC RAIPUR (C.G)

DEPARTMENT OF MECHANICAL

LESSON PLAN

session- April - May 2024

Session start as per university calendar:

course name -APPLIED MECHANICS

Name of Subject Teacher: BHOONANDANI SAHU , Branch- Electrical.

Lecturer plan T+P = 5

Course code: 2000173(037)

Discipline: All Branch | **Semester:** | **Class room Instruction Start Date:**

S.No.	Chapter No.	Topics	Sub Topic to be covered under this unit	Total hours	No. of periods planned	Actual No of periods taken	Date of Class Conduction	Use of AV resources if	Remarks if any
1	1	Identyfy the force systems for different conditions using concepts of mechanics	Defination of mechanics, statics,Dynamics	9	1	1	18/4/24	NA	
			concept of system of forces		2	2	22/4/24, 23/4/24		
			composition and resolution		2	2	25/4/24, 29/4/24		
			free body daigram		1	1	30/4/24		
			moment of a force and couple		3	3	30/4/24, 1/5/24 4/5/24		
2	2	Find out the centroid and centre of gravity of various engineering components	centre of gravity	11	2	2	6/5/24, 6/5/24	NA	
			c.g.of simple solid		3	3	8/5/24, 9/5/24 10/5/24		
			moment of inertia		3	3	14/5/24, 14/5/24 15/5/24		
			parallel axis theorem		3	3	16/5/24, 17/5/24 18/5/24		

S.No.	Chapter No.	Topics	Sub Topic to be covered under this unit	Total hours	No. of periods planned	Actual No of periods taken	Date of Class Conduction	Use of AV resources if	Remarks if any
3	3	Estimate force of friction in various conditions	Rough and smooth surface,angle of friction	14	4	2	21/5/24, 21/5/24	NA	
			method of reducing friction		5	2	24/5/24, 25/5/24		
			friction in journal bearing		5	2	27/5/24, 27/5/24		
4	4	Estimate velocities and acceleration in various linear and curilinear motion	concept of speed and velocity	16	1	1	28/5/24	NA	
			ngular velocity angular acceleratic		3	2	3/6/24, 5/6/24		
			motion under gravity		1	1	5/6/24		
			Newtons laws of motion		5	2	7/6/24, 8/6/24	NA	
			momentum and energy principles		5	3	10/6/24, 11/6/24 11/6/24		
5	5	Calculate power torque and energy associated with various engineering	defination of work force and torque	12	4	3	14/6/24, 14/6/24 15/6/24		
			equation of H.P.in terms of torque and R.P.M.		8	3	18/6/24, 18/6/24 19/6/24		
6	6	Simple lifting machines and transmission of power	law of machine	18	2	2	20/6/24, 25/6/24	NA	
			simple compound levers		6	3	26/6/24, 28/6/24 2/7/24		
			simple screw jack		4	1	3/7/24		
			transmission of power		6	2	12/7/24, 22/7/24		
				80		50			

GOVERNMENT CO.ED POLYTECHNIC RAIPUR (C.G)

DEPARTMENT OF MECHANICAL

LESSON PLAN

session- April + May 2024

Session start as per university calendar:

course name -APPLIED MECHANICS

Name of Subject Teacher: **BHOONANDANI SAHU**

Lecturer plan T+P = 5 , Branch- civil

Course code: 2000173(037)

Discipline: All Branch | **Semester:** | **Class room Instruction Start Date:**

S.No.	Chapter No.	Topics	Sub Topic to be covered under this unit	Total hours	No. of periods planned	Actual No of periods taken	Date of Class Conduction	Use of AV resources if	Remarks if any
1	1	Identyfy the force systems for different conditions using concepts of mechanics	Defination of mechanics, statics,Dynamics	9	1	1	15/4/24	NA	
			concept of system of forces		2	2	18/4/24, 19/4/24		
			composition and resolution		2	2	24/4/24, 24/4/24		
			free body daigram		1	1	26/4/24		
			moment of a force and couple		3	3	29/4/24, 29/4/24 30/4/24		
2	2	Find out the centroid and centre of gravity of various engineering components	centre of gravity	11	2	2	1/5/24, 3/5/24	NA	
			c.g.of simple solid		3	2	3/5/24, 6/5/24		
			moment of inertia		3	3	10/5/24, 13/5/24 13/5/24		
			parallel axis theorem		3	2	14/5/24, 15/5/24		

S.No.	Chapter No.	Topics	Sub Topic to be covered under this unit	Total hours	No. of periods planned	Actual No of periods taken	Date of Class Conduction	Use of AV resources if	Remarks if any
3	3	Estimate force of friction in various conditions	Rough and smooth surface,angle of friction	14	4	2	16/5/24, 20/5/24	NA	
			method of reducing friction		5	2	20/5/24, 21/5/24		
			friction in journal bearing		5	2	22/5/24, 22/5/24		
4	4	Estimate velocities and acceleration in various linear and curilinear motion	concept of speed and velocity	16	1	1	24/5/24	NA	
			ngular velocity angular acceleratic		3	2	25/5/24, 25/5/24		
			motion under gravity		1	1	28/5/24		
			Newtons laws of motion		5	3	3/6/24, 4/6/24 7/6/24	NA	
			momentum and energy principles		5	2	10/6/24, 11/6/24		
5	5	Calculate power torque and energy associated with various engineering	defination of work force and torque	12	4	3	13/6/24, 18/6/24 20/6/24		
			equation of H.P.in terms of torque and R.P.M.		8	3	25/6/24, 26/6/24 27/6/24		
6	6	Simple lifting machines and transmission of power	law of machine	18	2	2	29/6/24, 1/7/24	NA	
			simple compound levers		6	2	3/7/24, 4/7/24		
			simple screw jack		4	1	5/7/24		
			transmission of power		6	3	6/7/24, 8/7/24 22/7/24		
				80		48			

Branch - Mechanical
sem - IInd.

GOVERNMENT CO.ED POLYTECHNIC RAIPUR (C.G)

DEPARTMENT OF CIVIL,LESSON PLAN, Session- April - May 2024

Session start as per university calendar:

Course Name -ENVIRONMENTAL ENGINEERING AND SUSTAINABLE DEVELOPMENT

Name of Subject Teacher: **BHOONANDANI SAHU**

Lecturer plan T+P = 3Course code: 2000175(020)

Discipline: All Branch			**Semester:**		**Class room Instruction Start Date:**				
S.No.	**Chapter No.**	**Topics**	**Sub Topic to be covered under this unit**	**Total hours**	**No. of periods planned**	**Actual No of periods taken**	**Date of Class Conduction**	**Use of AV resources if any**	**Remarks if any**
1	1	Describe causes,prevention and remedial measures of water and air pollution	Introduction of environment and environment pollution	10	2	2	15/04/24, 18/04/24	NA	
			sources of water pollution		2	2	19/4/24, 26/04/24		
			water pollution and its adverse effect		2	2	27/04/24, 30/4/24		
			air pollution		2	2	1/05/24, 3/5/24		
			effect of air pollution and control		2	2	6/5/24, 9/5/24		
2	2	Explain causes,prevention and remedial measures of soil,noise,thermal and nuclear pollution	sources of soil pollution	10	1	1	11/5/24	NA	
			noise pollution		3	3	13/5/24, 14/5/24, 15/5/24		
			thermal pollution		3	3	18/5/24, 20/5/24 21/5/24		
			radioactive pollution		3	3	22/5/24, 27/5/24 3/6/24		

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S.No.	Chapter No.	Topics	Sub Topic to be covered under this unit	Total hours	No. of periods planned	Actual No of periods taken	Date of Class Conduction	Use of AV resources if any	Remarks if any
3	3	Sustainable development and clean technoloies	concept of sustainable development	10	4	4	4/6/24, 5/6/24, 6/6/24, 8/6/24	NA	
			solar power,wind energy		3	3	15/6/24, 19/6/24 24/6/24		
			biomass energy		3	3	26/6/24, 27/6/24 29/6/24		
4	4	Perform environmental impact assessment (EIA)for new design and project	public participation in EIA	10	1	1	4/7/24	NA	
			EIA process		3	3	6/7/24, 6/7/24, 8/7/24		
			EIA action plan		1	1	10/7/24		
			EIA implementation		2	3	10/7/24, 12/7/24, 13/7/24	NA	
			EIA dairecties		3	2	13/7/24, 12/7/24		
5	5	Create awarness for social issues and the environment	water conseration ,rain water haresting, green house effect	8	4	3	4/6/24, 5/6/24 6/6/24		
			acid rain and its effect		4	3	24/6/24, 26/6/24 27/6/24		
				48		46			