## UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA Academic Lesson Plan for 2nd Semester - 2023 (Summer)

Name of teaching faculty: Er.Saroj Kumar Sahu, Lecturer (Mechanical)

Dept.: Department of Mathematics & Science

Semester & Branch: 2<sup>nd</sup> Sem, Civil & Mechanical Engg.

Subject: Practical: PR3B: Workshop Practice-1

No. of periods per week: 6, Total Periods: 90 End semester Exam: 100 Marks, Sessional: 50 Marks,

Total Marks: 150 Marks

Sl. No	Week	Period	Topic to be covered
1		1st	Demonstrate safety practices in the fitting shop
2	1St	2nd	Do
3		3rd	Do
4		4th	Select suitable holding & clamping devices for fitting jobs.
5		5th	Do
6		6th	Do
7		1st	Select suitable tools like- files, vice, chisels, punch, etc
8	2nd	2nd	Do
9		3rd	Do
10		4th	Sawing, Chipping, Fitting, Craping, Grinding, Marking,
11		5th	Do
12		6th	Do
13	3rd	1st	Tapping, Drilling & Angular cutting.
14		2nd	Do
15		3rd	Do
16		4th	Introduction and use of measuring tools used in fitting shop
17		5th	Do
18		6th	Do

19		1st	H-fitting in the mild steel (ms) square.
20	4th	2nd	Do
21		3rd	Do
22		4th	Prepare one job on male female fitting
23		5th	Do
24		6th	Do
25	5th	1st	Safety precautions in welding, safety equipment's
26		2nd	Do
27		3rd	Do
28		4th	Introduction to welding, type of welding,
29		5th	Do
30		6th	Do
31		1st	Introduction to electric arc welding (AC & DC)
32		2nd	Do
33	6th	3rd	Do
34		4th	Applications of arc welding. Introduction to polarity
35		5th	Do
36		6th	Do
37		1st	Demonstrate & use of the different tools
38		2nd	Do
39	7th	3rd	Do
40		4th	various types of joints & end preparation
41		5th	Do
42		6th	Do
43	8th	1st	Preparation of lap joint by arc welding rod.
44		2nd	Do
45		3rd	Do
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46		4th	Preparation of single V or double V butt joint by arc welding
47		5th	Do
48		6th	Do
49		1st	TURNING SHOP, Introduction
50		2nd	Do
51	9th	3rd	Do
52		4th	Safety precaution & safety equipment
53		5th	Do
54		6th	Do
55		1st	Various marking, measuring, cutting & holding tools
56	10th	2nd	Do
57		3rd	Do
58		4th	Demonstration of different parts of a lathe
59		5th	Do
60		6th	Do
61	11th	1st	demonstration on centering
62		2nd	Do
63		3rd	Do
64		4th	turning operation in a group of 06 students
65		5th	Do
66		6th	Do
67		1st	plain turning, taper turning & grooving practices
68	12th	2nd	Do
69		3rd	Do
70		4th	Demonstrate safety practices in sheet metal shop.
71		5th	Do
72		6th	Do

73		1st	Prepare surface development for the jobs
74	13th	2nd	Do
75		3rd	Do
76		4th	Cut M.S and G.P. sheets according to the surface development
77		5th	Do
78		6th	Do
79		1st	Select hand tools for sheet metal work.
80	14th	2nd	Do
81		3rd	Do
82		4th	Making of sheet metal joints
83		5th	Do
84		6th	Do
85		1st	Prepare a sheet metal tray or a funnel
86	15th	2nd	Do
87		3rd	Do
88		4th	EXPOSURE TO C.N.C MILLING / LATHE MACHINE
89		5th	Do
90		6th	Do

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