

UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA

Academic Lesson Plan for 1st Semester – 2023 (Winter)

Name of teaching faculty: Sri Saroj Kumar Sahu (Mechanical)

Dept.: Department of Mathematics & Science

Semester & Branch: 1st Sem, Electrical & ETC 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	1st	Demonstrate safety practices in the fitting shop
2		2nd	Do
3		3rd	Do
4		4th	Select suitable holding & clamping devices for fitting jobs.
5		5th	Do
6		6th	Do
7	2nd	1st	Select suitable tools like- files, vice, chisels, punch, etc
8		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	4th	1st	H-fitting in the mild steel (ms) square.
20		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	6th	1st	Introduction to electric arc welding (AC & DC)
32		2nd	Do
33		3rd	Do
34		4th	Applications of arc welding. Introduction to polarity
35		5th	Do
36		6th	Do
37	7th	1st	Demonstrate & use of the different tools
38		2nd	Do
39		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

46		4th	Preparation of single V or double V butt joint by arc welding
47		5th	Do
48		6th	Do
49	9th	1st	TURNING SHOP, Introduction
50		2nd	Do
51		3rd	Do
52		4th	Safety precaution & safety equipment
53		5th	Do
54		6th	Do
55		10th	1st
56	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		12th	1st
68	2nd		Do
69	3rd		Do
70	4th		Demonstrate safety practices in sheet metal shop.
71	5th		Do
72	6th		Do

73	13th	1st	Prepare surface development for the jobs
74		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	14th	1st	Select hand tools for sheet metal work.
80		2nd	Do
81		3rd	Do
82		4th	Making of sheet metal joints
83		5th	Do
84		6th	Do
85	15th	1st	Prepare a sheet metal tray or a funnel
86		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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