## UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA Academic Lesson Plan for 2<sup>nd</sup> Semester - 2022 (Summer)

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

Department: Mechanical Engineering,

Semester: 2nd

No. of periods per week: 6

End semester exam: 100

Total Marks: 150

Subject: Workshop Practice-I Total Periods: 90 Sessional-50

Sl. No	Week	Period	Topic to be covered
1	1St	1 <sup>st</sup>	Demonstrate safety practices in the fitting shop
2		2nd	Do
3		3rd	Do
4		4th	Select suitable holding & clamping devices for fitting jobs.
5		5 <sup>th</sup>	Do
6		6 <sup>th</sup>	Do
7		1 <sup>st</sup>	Select suitable tools like- files, vice, chisels, punch, etc
8		2nd	Do
9	- 5 4	3rd	Do
10	2nd	4th	Sawing, Chipping, Fitting, Craping, Grinding, Marking,
11		5th	Do
12		6 <sup>th</sup>	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		6 <sup>th</sup>	Do

19		1 <sup>st</sup>	H-fitting in the mild steel (ms) square.
20	4th	2nd	Do
20		3rd	Do
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22		4th	Prepare one job on male female fitting
23		5th	Do
24		6 <sup>th</sup>	Do
25	.1	1st	Safety precautions in welding, safety equipment's
26	5th	2nd	Do
27		3rd	Do
28		4 <sup>th</sup>	Introduction to welding, type of welding,
29		5th	Do
30		6 <sup>th</sup>	Do
31		1 <sup>st</sup>	Introduction to electric arc welding (AC & DC)
32		2nd	Do
33		3rd	Do
34	6 <sup>th</sup>	4th	Applications of arc welding. Introduction to polarity
35		5th	Do
36		6 <sup>th</sup>	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		6 <sup>th</sup>	Do
43	8th	1st	Preparation of lap joint by arc welding rod.
44		2nd	Do
45		3rd	Do

	1		Dependention of simple V on double V butt
46		4th	Preparation of single V or double V butt joint by arc welding
47		5 <sup>th</sup>	Do
48		6 <sup>th</sup>	Do
49		1st	TURNING SHOP, Introduction
50		2nd	Do
51	a th	3rd	Do
52	9th	4th	Safety precaution & safety equipment
53		5th	Do
54		6 <sup>th</sup>	Do
55		1st	Various marking, measuring, cutting & holding tools
56		2nd	Do
57	10th	3rd	Do
58	10.11	4th	Demonstration of different parts of a lathe
59		5th	Do
60		6 <sup>th</sup>	Do
61	11 <sup>th</sup>	1 <sup>st</sup>	demonstration on centering
62		2nd	Do
63		3rd	Do
64		4th	turning operation in a group of 06 students
65		5th	Do
66		6 <sup>th</sup>	Do
67		1 <sup>st</sup>	plain turning, taper turning & grooving practices
68		2nd	Do
69	12th	3rd	Do
70		4th	Demonstrate safety practices in sheet metal shop.
71		5 <sup>th</sup>	Do
72		6 <sup>th</sup>	Do

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

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