## UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA Academic Lesson Plan for 1st Semester - 2022 (Winter)

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

Department: Mechanical Engineering,

Semester: 1st Subject: Workshop Practice-I

No. of periods per week: 6 Total Periods: 90

End semester exam: 100 Sessional-50

Total Marks: 150

S1. 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		5th	Do
6		6 <sup>th</sup>	Do
7	2nd	1 <sup>st</sup>	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		6 <sup>th</sup>	Do
13	3rd	1 <sup>st</sup>	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		1st	H-fitting in the mild steel (ms) square.
20		2nd	Do
21	4th	3rd	Do
22	-	4th	Prepare one job on male female fitting
23		5 <sup>th</sup>	Do
24		6 <sup>th</sup>	Do
25		1 <sup>st</sup>	Safety precautions in welding, safety equipment's
26	5 <sup>th</sup>	2nd	Do
27		3rd	Do
28		4th	Introduction to welding, type of welding,
29		5 <sup>th</sup>	Do
30		6 <sup>th</sup>	Do
31		1 <sup>st</sup>	Introduction to electric arc welding (AC & DC)
32		2 <sup>nd</sup>	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		1 <sup>st</sup>	Demonstrate & use of the different tools
38		2nd	Do
39	_+h	3rd	Do
40	7 <sup>th</sup>	4 <sup>th</sup>	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		2 <sup>nd</sup>	Do
45		3rd	Do

46		4th	Preparation of single V or double V butt joint by arc welding
47		5th	Do
48		6 <sup>th</sup>	Do
49		1st	TURNING SHOP, Introduction
50		2nd	Do
51	a +1b	3rd	Do
52	9th	4th	Safety precaution & safety equipment
53		5th	Do
54		6 <sup>th</sup>	Do
55		1 <sup>st</sup>	Various marking, measuring, cutting & holding tools
56		2nd	Do
57	10 <sup>th</sup>	3rd	Do
58	1001	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		4 <sup>th</sup>	Demonstrate safety practices in sheet metal shop.
71		5 <sup>th</sup>	Do
72		6 <sup>th</sup>	Do

73		1st	Prepare surface development for the jobs
74		2nd	Do
75	41-	3rd	Do
76	13 <sup>th</sup>	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		1 <sup>st</sup>	Select hand tools for sheet metal work.
80		2nd	Do
81	_	3rd	Do
82	14 <sup>th</sup>	4th	Making of sheet metal joints
83		5th	Do
84		6 <sup>th</sup>	Do
85		1st	Prepare a sheet metal tray or a funnel
86	15 <sup>th</sup>	2 <sup>nd</sup>	Do
87		3rd	Do
88		4th	EXPOSURE TO C.N.C MILLING / LATHE MACHINE
89		5 <sup>th</sup>	Do
90		6 <sup>th</sup>	Do

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