

MYMENSINGH POLYTECHNIC INSTITUTE
TECHNOLOGY: MECHANICAL

Outline Plan of Teaching (Semester Plan)

Subject: ADVANCED WELDING (67053)

5th Semester /1st & 2nd Shift

T	P	C
2	6	4

	Theory			Practical		
	<u>Content</u>	<u>Activity</u>		Practical Job No	<u>Content</u>	<u>Activity</u>
	(Specific Objectives)	Test	Learning Material		(Practical Name)	(Resources, Place, Tutorial, Methodology, Reference books, Viva, Job sheet)
1	Understand the scope and importance of welding.			1	Perform lap joint and double vee butt joint by arc welding process.	
2	Understand the arc welding processes.			2	Perform the butt joint of aluminium plates.	Job sheet
3	Understand the gas welding.	Quiz Test-1		3	Perform butt joint of cast iron plates.	Job sheet
4	Understand the principles of gas cutting.			4	Perform butt joint of GI pipes.	Job sheet
5	Understand the resistance welding processes.			5	Perform lap joint of stainless steel plates.	Job sheet
6	Understand thermit wilding.	Class Test-1		6	Perform butt joints by oxy-acetylene gas welding of mild steel plates.	Job sheet
7	Understand the TIG welding.			7	Perform Lap/butt joint with aluminum bars/plates.	Job sheet
8	Understand the TIG welding.			8	Perform lap/butt joint with copper bars/plates	Job sheet
9	Understand the MIG welding.	Quiz Test-2		9	Perform lap/butt joint of stainless steel bars with plates	Job sheet
10	Understand the MIG welding.			10	Perform Brazing of steel pipes	Job sheet
11	Understand the techniques of Various G- position welding.			11	Perform joints of GI and stainless sheet with resistance welding set (welding)	Job sheet
12	Understand the concept of plasma arc cutting.	Class Test-2		12	Perform the joint of stainless steel plate by TIG.	Job sheet
13	Understand basic concept of laser welding.			13	Perform the joints of stainless steel plate by MIG.	Job sheet
14	Understand the techniques of under water welding			14	Perform wilding in 2G, 4G, 5G & 6G position.	Job sheet
15	Understand the techniques of under water welding			15	Perform the work of joining of broken shaft tube well pipe by thermit welding.	Job sheet
16	Identify the defects of welding.			16	Perform the Dye penetration test at the welding joints for finding defect.	

Marker pan, White Board, Multimedia

