

**COURSE TITLE** : **MANUFACTURING LAB-I**  
**COURSE CODE** : **3057**  
**COURSE CATEGORY** : **B**  
**PERIODS/WEEK** : **4**  
**PERIODS/SEMESTER** : **60**  
**CREDITS** : **2**

**TIME SCHEDULE**

Module	Topic	Periods
1	Machine shop practice	17
2	Fitting Practice	13
3	Shaper Practice	17
4	Welding Practice	13
<b>TOTAL</b>		<b>60</b>

**GENERAL COURSE OUTCOME**

Module	G.O	Student will be able to
1	1	Understand the working of lathe
	2	Understand the various operations to be carried out on a lathe.
2	1	Carryout various fitting works.
	2	Understand the working of shaper machine.
	3	Understand the various operations to be carried out on a shaper machine.
	4	Understand arc welding equipments.
	5	Carryout various works such as lap joint, bult joint and T joint.

**SPECIFIC COURSE OUTCOME**

**MODULE I**

- 1.1.1 Know the working of lathe
- 1.1.2 Carryout different jobs on lathe

## **MODULE II**

- 2.1.1 Know the various fitting joints
- 2.1.2 Carry out Fitting Practice

## **MODULE III**

- 3.1.1 Know the working of shaper
- 3.1.2 Carryout different jobs on shaper

## **MODULE IV**

- 4.1.1 Understand the operation of welding
- 4.1.2 Carryout different welding operations

## **CONTENT DETAILS**

### **MODULE I**

Machine shop practice:

Lathe Work

Turning practice – plain and step turning, Taper turning practice – offset method and attachment method

### **MODULE II**

Fitting Practice:

Different types of male and female joints

### **MODULE III**

Shaper Practice:

Grooving practice

### **MODULE IV**

Welding Practice:

Arc welding practice, Lap joint, Butt joint and Tee joint

### **REFERENCE:**

S.K.Hajra Chaudhary - Workshop Technology-II - Media promotors and publishers pvt.Limited  
K C john- Mechanical Workshop practice - PHI Learning Pvt. Ltd.