Pop Up Class – Intermediate Lathe

1. Class Overview
   o Description
     This class will enable the student to describe and perform the more common Lathe machine operations
   o Prerequisites
     Shop Safety, Basic Lathe
   o Anticipated Class Size – 10 max
   o Class Duration – 1 ½ hours
   o Material Needed
     None

2. Safety
   Machine Shop dress code and safety glasses

3. Educational Objectives
   o Students will be able to:
     ▪ Indicate a part in using a four jaw chuck
     ▪ Face a part to length
     ▪ Turn outside diameter to size
     ▪ Bore inside diameter to size

4. Class Format
   o Pre-Class activity
     i. None
   o In-Class activity
     i. Indicate part using a four jaw chuck
        1. Jaw set up
        2. Procedure for indicating
     ii. Face part to length
        1. Tool selection
        2. Feeds and speeds for facing
        3. Facing procedures
     iii. Turn outside diameter to size
1. Tool selection
2. Feeds and speed For turning
3. Turning procedures

iv. Bore inside diameter to size
   1. Tool selection
   2. Feed and speeds for boring
   3. Boring procedures

v. Activity
   o Set jaws and indicate part
   o Face part to length to drawing
   o Turn outside diameter to drawing
   o Bore inside diameter to drawing

vi. Assessment
   o Indicate part to .002
   o Face part to within .005 of part length
   o Turn Outside diameter to +.005 o.d. size
   o Bore inside diameter to +.005 of bore size

5. Evaluation
   o Students fill out an evaluation on the content, learning objectives, and instructor.