

## Criteria Sheet for the Basic Machine Shop class held in the Physics Shop

Name \_\_\_\_\_

Date of Introduction Class \_\_\_\_\_

### **SAWS**

- Competency in the use of the vertical band saw
- Competency in the use of the horizontal band saw

### **DRILL PRESS**

- Exhibit a safe working knowledge of using a drill press

### **LATHE**

- Identify the three basic parts of an engine lathe
- Setup lathe to face off and turn down a work piece
- Center drill and drill a hole using the tailstock
- Bore out the inside diameter of a part to a specific size
- Cut an internal screw thread using a tap in the lathe
- Cut an external screw thread using the lathe for alignment
- Learn how to adjust the feeds and speeds of the lathe

### **MILLING MACHINE**

- Align the machine vise to travel parallel with the “X” axis
- Ability to change tooling in the machines head
- Machine a part square and parallel to a specific size
- Locate the position of a hole or slot using an edge finder
- Locate the center of an existing hole using a dial indicator
- Demonstrate working knowledge in the use of a sine bar

### **MEASURING SKILLS**

- Competent in the use of dial calipers
- Competent in the use of micrometers
- Competent in the use of a combination square
- Competent in the use of the height gage

I \_\_\_\_\_ understand that I will not be given privileges

(Print Name)

To work in the Physics Machine Shop after-hours until I fulfill all of the requirements listed above. I also understand that this privilege may be taken from me at any time for non-compliance with the rules.

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