

January 15th 2016

Module Two: Power Tools



Part one:

This week you need to complete basic shop training. If you are already shop trained, you do not need to complete this part. If you have not been shop trained, you need to setup an appointment to get shop trained. Shop training takes about 15 minutes to complete and once you have completed shop training you will have shop access anytime it is open.

Appointments should be made with either Jacob Amos or Paige Hoffert.

Jacob: amos@up.edu

Paige: hoffertm@up.edu

Part two:

This activity uses a dremel tool. You will be polishing a piece of metal and etching your name or another phrase onto a scrap piece of metal. The goal is to get familiar with changing out bits, using a hand tool, safety procedures and how to work with metals.

Supplies:

- Scrap piece of metal
- Dremel tool
- Different bits
- Clamps
- Safety gear

Steps:

1. Safety glasses are required! Hair must be tied back if longer than your shoulders and baggy clothing should not be worn. Close toed shoes are required and no jewelry of any kind, especially on the hands, should be worn.
2. Inspect your piece of metal, and clamp to table.
3. Put a polishing bit into the dremel and polish part of your metal piece. Start with an edge to get the hang of how the dremel works. Do not get your face too close to the work in case of slag or waste being thrown from the work surface. Remember, things that are moving at high speeds tend to heat up.
4. After polishing, remove the bit and put in an etching bit. You can etch your name into the metal now. It is not as easy as it looks to get nice clean lettering.
5. Feel free to use any other bits as practice.
6. After you are done, take a picture of your piece and email it to Paige at hoffertm@up.edu
7. Put away all tools!