

# John M. Burt

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Blacksmith

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## **BLACKSMITHING YOUR OWN TOOLS AND HARDWARE with John Burt**

October 8-12, 2012

Dear Student,

Thank you for your interest in enrolling in the tool and hardware class for October. We will be working in mild steel, and tool steel; both hot and cold. Hopefully the weather will be cooler in Oct. so working at the forges will be less stressful than in mid-summer. The class will however be intense, as I plan to impart a lot of information, and we only have five days to cover it all. Hot forging takes some physical stamina; you will be exerting yourselves on a number of levels. I encourage anyone, of any age or gender, who is not challenged to stand for periods of time, to undertake this rewarding class.

Each student will be making several of their own edge tools at the forge, i.e. layout knives, and a small chisel. In addition, students will be making their own hinges, either at the forge or with cold techniques, or a combination of both. This will give each student a diverse range of techniques to utilize in designing and making their own hardware for their future projects.

The techniques for making metalworking tools and woodworking tools are virtually the same except for tempering. Thus if you would rather forge decorative chisels for metal rather than wood, it would be fine.

An old blacksmith adage states “five minutes at the forge saves an hour at the bench”. I will be encouraging you all to work the metal for hardware hot, up to a point where cold cutting and filing are appropriate for final fitting and decoration.

If you have any questions, please contact me at the above phone, or by email, and I will answer your questions.

I look forward to working with you.

Sincerely,

John Burt

## **TOOL LIST**

### *General;*

Writing pad and pencil

Safety glasses

Apron

Cotton cap or bandana

Leather gloves

12" Combination square

6" machinist ruler

1 1/2# or 2# cross pein hammer [sometimes called a "Machinist Cross Pein"]

3/4" or 1" cold chisel

Center punch

### *Files;*

1 single cut [half round] 6-8" with handle

1 double cut [half round] 6-8" with handle

1 single cut [triangular] 6-8" with handle

[Other assorted files if you have them]

Note: If you are interested in making miniature or small cabinet hardware a set of needle files would be helpful, as well as a jeweler's saw/ fret saw with a dozen #2 or #3 blades [you will break them!]. Larger hardware calls for a hacksaw with several fine tooth blades.

This comprises the basic kit. It should not preclude your bringing a greater variety, if you already have them.

## **SYLLABUS:**

Oct. 8; AM: Introduction, overview of class projects, basic ferric metallurgy

PM: Handouts and explanation of contents, preparation of tool making materials, design parameters, heat treatment of tool steels

Oct 9; AM: Introduction to forge; gas, coal, charcoal fuels. Building an efficient fire.

Tooling. Demonstrate the making of one tool, start to finish.

PM: Begin forging tools, heat treatment, final sharpening/shaping

Oct 10

AM: Students finish making tools.

PM: Discussion of hardware, design, hot and cold techniques. Begin demo of cold work techniques

Oct 11

AM: Begin demo of hot techniques.

PM: Students design their own piece, begin to make their own

Oct 12

AM: Students make their own hardware

PM: Finish hardware, clean up, certificates.