Introductory Hand Engraving

This course covers basic concepts and skills related to hammer and chisel engraving. Special emphasis will be placed on tool sharpening, pattern theory, designing, transferring, and cutting patterns.

**Dr. Michael J. Pierson** has been an academic administrator and taught technical subjects in a university setting for over 35 years. He has been engraving for 24 years, was trained by Frank Hendricks, and is a member of the Firearms Engraver’s Guild of America. He is proficient with both the hammer and chisel and pneumatic engraving techniques and a wide variety scroll patterns.

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**Introductory Hand Engraving**

**Tool List**

**REQUIRED TOOLS AND SUPPLIES:**

1. Engraver’s chasing hammer, 1-1/8” face
2. Four 3/32” Carbalt XD blanks
3. #7 straight liner in standard width
4. #12 straight liner in standard width
5. #20 straight liner in standard width
6. Steel ruler, 6 inch
7. Dividers
8. Scribe
9. Stabilio # 8008 pencil
10. Burnisher
11. Dot punch set, No. 1, 2, & 3
12. Optivisor, #3 lens recommended
13. 35mm empty film canister
14. Talcum powder
15. Clear tape
16. Money clip, nickel silver, spring tempered
17. Etching ink

**TOOL AND SUPPLY SOURCES:**
GRS Tools
900 Overlander Road
Emporia, KS 66801
Phone: 620-343-1084
Toll Free: 800-835-3519
Fax: 620-343-9640
E-mail: GrsTools@GrsTools.com

The Ngraver Company
67 Wawecus Hill Rd
Bozrah, CT 06334-1529
Phone: 800-823-1533
Fax: 860-823-1533
Web site: Ngraver.com/engrave.htm

Rudolph Faust, Inc.
542 South Ave East
Cranford NJ 07016
Email: faust@faustink.com
Phone: 908-276-6555

Stuller
P.O. Box 87777
Lafayette, La. 70598-7777
Phone: 800-877-7777
Web site: www.stuller.com

Lindsay Engraving and Tools
3714 West Cedar Hills
Kearney, Nebraska 68845
308-236-7885
Web site: www.LindsayEngraving.com

REQUIRED TEXTS:
None, complete Power Point notes will be provided.

RESOURCE TEXTUAL MATERIALS:
Abbiatico, Mario, Modern Firearms Engravings, Gardone: Mario Abbiatico, 1980 – Library Call Number NE 2700 A 1980 c.2


Meeks, James, *The Art of Engraving*, Montezuma, Iowa: F. Brownell and Son, 1973 – Library Call Number NE 2700 M43


**OUTLINE OF COURSE CONTENT:**

I. Engraving tools
   A. Types
   B. Sharpening

II. Pattern theory
   A. Spiral type
      1. Circular
      2. Elliptical
   B. Spiral characteristics
      1. Corridor type
         a. True corridors
         b. Holding corridor
      2. Relationship to other spirals
         a. Common stem spirals
         b. Overlaid spirals
   C. Spiral measurements
      1. Spiral height
      2. Corridor height
      3. Extension length
      4. Standoff
      5. Number of turns
      6. Angle of departure
   D. Leaf anatomy
      1. Leaf types
         a. Adjacent
         b. Separated
      2. Leaf parts
         a. Sweeps
         b. Buds
         c. Lobes
3. Leaf measurements
   a. Leaf height
   b. Stem thickness
   c. Sweep height
   d. Bud height
   e. Leaf meter
   f. Leaf width
   g. Leaf separation

III. Designing patterns
   A. Selecting scroll style
   B. Laying out the pattern
      1. Outline the panel
      2. Establish the panel’s center line
      3. Draw planning circles
      4. Establish point of origination
      5. Establish scroll height, corridor height, and rate of turn

IV. Cutting patterns
   A. Hammer and chisel or chasing method
   B. Borders
   C. Lining
   D. Backgrounds
      1. Flush
      2. Relief
   E. Transfer plates
   F. Transfer techniques

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