Lassen Community College Course Outline

GSS-112 Machine Shop For Gunsmiths

2.0 Units

I. Catalog Description

An introductory course designed to help the beginner or the pro in the use of machine shop equipment as it relates to gunsmithing. This course requires an additional fee of \$19 to cover the costs of course handouts, cutting oil, sandpaper, small parts (pins, roll pins, small springs, etc.), and steel.

Does Not Transfer to UC/CSU 8 Hours Lecture, 16 Hours Outside of Class, 92 Hours Lab, 116 Total Hours of Instruction Scheduled:

II. Coding Information

Repeatability: Take 1 Time Grading Option: Pass/No Pass Only Credit Type: Credit - Not Degree Applicable TOP Code: 095630

III. Course Objectives

A. Course Student Learning Outcomes

Upon completion of this course the student will be able to: Safely use a lathe and properly grind general turning "V" and square threading tools.

B. Course Objectives

Upon completion of this course the student will be able to:

- 1. Describe cutting tools and proper usage.
- 2. Demonstrate the proper sharpening of cutting tools.
- 3. Demonstrate setup on machines.
- 4. Identify measuring instruments and their usage.
- 5. Machine round and square project steel to proper dimensions.

IV. Course Content

- A. Safety in the shop on major machinery
 - 1. Lathes
 - 2. Milling machines
 - 3. Grinders
 - 4. Drill press
 - 5. Metal cutting saws
- B. Operation of machine shop tools
 - 1. Lathes
 - 2. Milling machines
 - 3. Grinders
 - 4. Drill press
 - 5. Metal cutting saws
- C. Use of precision measuring tools

- 1. Micrometers
- 2. Depth gauges
- 3. Calipers
- 4. Dial indicators
- D. Manufacture of specialized gunsmithing tools
 - 1. Grinding tool bits
 - 2. Turning tapers
 - 3. Threading
 - 4. Reading machine tool prints

V. Assignments

A. Appropriate Readings

Instructor Handouts and Trade Journals

- **B. Writing Assignments** The student will be required to keep a journal of notes.
- C. Expected Outside Assignments See 'A' and 'B' above.

D. Specific Assignments that Demonstrate Critical Thinking Students will demonstrate critical thinking by designing and altering tools to increase productivity.

VI. Methods of Evaluation

The student will be evaluation on class participation and completion of lab assignments.

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

Traditional Classroom Delivery Correspondence Delivery

Hybrid Delivery

Online Delivery

Lecture and Lab Demonstrations

VIII. Representative Texts and Supplies

Instructor Handouts and Trade Journals

IX. Discipline/s Assignment

Gunsmithing, Machine Tool Technology

X. Course Status

Current Status: Active Original Approval Date: 5/1/1990 Revised By: John Martin Curriculum/Academic Standards Committee Revision Date: 11/15/2022