

Lassen Community College Course Outline

GSS-134 Caustic Bluing

1.0 Unit

I. Catalog Description

A course designed to introduce the student to bluing, commercial black oxide finish on firearms. Preparation of surface finish, care and use of chemicals. Understanding chemical process and control, professional technique and equipment. This course requires an additional fee of \$19 to cover the costs of course handouts, bluing salts, oil, and sandpaper.

Does Not Transfer to UC/CSU

4 Hours Lecture, 8 Hours Outside of Class, 44 Hours Lab, 56 Total Hours of Instruction Scheduled:

II. Coding Information

Repeatability: Take 1 Time

Grading Option: Pass/No Pass

Credit Type: Credit - Not Degree Applicable

TOP Code: 099900

III. Course Objectives

A. Course Student Learning Outcomes

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

1. Polish and color buff firearm parts to a factory polish and caustic blue them.
2. Polish and color buff firearms parts to a very high polish with no ripples or washout of lettering or screw holes and blue them.

B. Course Objectives

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

1. Describe safety procedures involved in setting up and operating caustic bluing tanks.
2. Describe materials, assembly and physical location of bluing tanks as it pertains to safety and ease of operation.
3. Demonstrate proper usage of metal removal and polishing tools at a novice level.
4. Demonstrate proper operation of bluing tanks.
5. Demonstrate proper knowledge of re-assembly tools and techniques.

IV. Course Content

A. Safety in the shop

1. Power tools
2. Bench tools
3. Chemicals

B. Disassemble and surface preparation

1. Disassembly-assembly tools
2. Sanding
3. Buffing
4. Sand and bead blasting

C. Buffing wheels and buffing compounds

1. Types of wheels
2. Types of buffing compounds
- D. Caustic bluing process
 1. Basic chemical composition and controls
 2. Degreasing
 3. Contaminates
 4. Temperature ratio
 5. Types of steel and how they react
 6. Chemical Neutralizing
 7. Protective oils

V. Assignments

A. Appropriate Readings

Trade journals and various instructor handouts.

B. Writing Assignments

Student is required to keep a journal of notes.

C. Expected Outside Assignments

None.

D. Specific Assignments That Demonstrate Critical Thinking

The student will demonstrate critical thinking through the assessment of their speed and quality of work and adjustment to improve that speed and quality.

VI. Methods of Evaluation

Evaluation will be based on student's progress and participation.

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

Demonstration and laboratory practice.

VIII. Representative Texts and Supplies

Trade journals, manufacturer's instructions and recommended readings.

IX. Discipline/s Assignment

Gunsmithing

X. Course Status

Current Status: Active

Original Approval Date: 6/1/1990

Revised By: John Martin

Curriculum/Academic Standards Committee Revision Date: 11/15/2022