

# Lassen Community College Course Outline

## GSS-131 Alternative Metal Finishes

1.0 Units

### I. Catalog Description

This course is designed to cover alternative metal finishes available to the gunsmith. Topics will include Teflon Coating, Powder Coating, as well as other metal finishes.

### Diversity Statement

Our commitment to diversity requires that we strive to eliminate barriers to equity and that we act deliberately to create a safe and inclusive environment where individual and group differences are valued and leveraged for the growth and understanding as an educational community.

### Additional Course Information

*Transfer Status:*

- Does Not Transfer to UC/CSU

*Total Number of Hours by Instructional Method:*

- 6 Hours Lecture, 12 Outside Class Hours, 34 Hours Lab, 52 Total Hours of Instruction

*Scheduled:*

- Summer

### II. Coding Information

Repeatability: Not Repeatable -Take 1 Time

Grading Option: Pass/No Pass only

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. Properly prepare gun parts and apply selected finish in a manner to obtain an industry standard finish.

#### B. Course Objectives

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

1. Demonstrate the ability to prepare the metal surface appropriately according to the type of metal and the finish selected to be applied.
2. Demonstrate the ability to apply the selected finish in a manner to obtain an industry standard finish.

## IV. Course Content

- A. Teflon Coating Process
  - 1. Preparing the metal
  - 2. Preparing the solution
  - 3. Proper Application
  - 4. Proper curing
- B. Powder Coating Process
  - 1. Suitable materials for powder coating
  - 2. Preparing the metal
  - 3. Powder coating process
- C. Bake-on Ceramic Coatings
  - 1. Surface preparation
  - 2. Mixing
  - 3. Racking
  - 4. Spray gun set up
  - 5. Baking
- D. Safety
- E. Clean up

## V. Assignments

### A. Appropriate Readings

Trade manuals will be the primary reference sources, may also include instructor handouts. Additional information resources will include product and use guides from industry manufacturers to enhance the learning process.

### B. Writing Assignments

Students will be required to complete a set of notes covering lectures, labs and demonstrations. Notes will include appropriate diagrams, when applicable, for clarity of information. Assignments may be made involving repair, refinishing, and/or modifications to the studied firearm parts. Assignments will approximate problems actually encountered in the field. Performance levels must meet or exceed industry and/or shop specifications.

### C. Expected Outside Assignments

See 'A' and 'B' above. Students will be required to complete two hours of outside-of-class homework for each hour of lecture.

### D. Specific Assignments that Demonstrate Critical Thinking

Students will demonstrate the ability to choose the correct coating type based on the type of material of the firearm or work piece, as well as how to properly prepare the work piece, properly setup the equipment required, apply the coating, and to reassemble the firearm or work piece without damaging the coating.

## VI. Methods of Evaluation

List general evaluation methods

Classroom discussion, lab demonstrations and activities, 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

***Only include the appropriate delivery modalities***

### **Traditional Classroom Delivery**

Lecture, power point presentations, discussion, audio/visual aids, lab demonstrations, group exercises, and individual programs.

## VIII. Representative Texts and Supplies

This course will rely on an open-source training manual made available free by the coating manufacturers, as well as instructor handouts.

## IX. Course Status

1. Current Status: Active
2. Original Approval Date: 06/04/2001
3. Course Originator: John Martin
4. Board Approval Date:
5. Chancellor's Office Approval Date:
6. Revised By:
7. Curriculum/Academic Standards Committee Revision Date: 3/5/2024