Lassen Community College Course Outline

GSS-124 Welding Fabrication for Gunsmiths 1.0 Unit

I. Catalog Description

Students will select and fabricate gunsmith related projects using appropriate welding processes and techniques. Students will also have an opportunity to learn or improve welding skills related to the gunsmith vocation.

Does Not Transfer to UC/CSU
50 Hours Lab, 50 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: 095650

III. Course Objectives

A. Course Student Learning Outcomes

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

Safely handle equipment to gas tungsten weld selected joint designs to critical industry standards.

B. Course Objectives

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

1. Explain the setup of both oxygen/acetylene welding and cutting.
2. Demonstrate correct project layout.
3. Demonstrate oxy/ace cutting.
4. Employ oxygen/acetylene welding to construct project.
5. Demonstrate setup of SMAW machine.
6. Identify and select correct electrodes.
7. Fabricate project using SMAW.
8. Demonstrate cleanup procedures.

IV. Course Content

A. Safety precautions
   1. Electrical shock
   2. Radiation hazards
   3. Compressed gases
   4. Air contamination
   5. Emergency shop procedures
B. Oxyacetylene welding
   1. T-joints
   2. Open butt joint - flat
C. Shielded metal arc welding
   1. T-joint - flat
   2. T-joint - vertical

D. Gas metal arc welding
   1. T-joint - flat
   2. T-joint - vertical
E. Gas tungsten arc welding
   1. T-joint - flat
   2. T-joint - vertical
F. Cutting
   1. Oxyacetylene cutting
   2. Plasma arc cutting
G. Gunsmith projects
   1. Portable shooting table
   2. Portable target frame
   3. Bluing tanks
   4. Bluing tank stand
   5. Silhouettes
   6. Trap stand

V. Assignments

A. Appropriate Readings
The student will be assigned readings from various 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 be required to demonstrate an understanding of welding concepts and practices by applying the technical information to a required number of gunsmithing related projects. Performance levels will meet or exceed industry and/or shop specifications.

VI. Methods of Evaluation

The student will be evaluated on class participation and completion of class 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, Laboratory, Demonstration

VIII. Representative Texts and Supplies

Instructor Handouts, Trade Journals, Manufacturers Suggested Readings

IX. Discipline/s Assignment

Gunsmithing, Welding Technology

X. Course Status

Current Status: Active
Original Approval Date: 5/1/1990
Revised By: John Martin
Curriculum/Academic Standards Committee Revision Date: 11/15/2023