

# Lassen Community College Course Outline

## GSS-114 Basic Rifle Barreling

1.0 Unit

### I. Catalog Description

This course is designed to help the beginner or the pro in the use of machine shop equipment to barrel action rifle receivers. 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

4 Hours Lecture, 46 Hours Lab

Scheduled:

### II. Coding Information

Repeatability: 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:

Describe the barrel-fitting sequence and tolerances for the three breech types.

#### B. Course Objectives

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

1. Describe different styles of breeching.
2. Demonstrate the grinding of general turning, threading and boring tool bits.
3. Set up, turn and thread a barrel blank.

### 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. Headspacing
  - 1. Rimmed cartridge
  - 2. Semi-rimmed cartridges
  - 3. Belted cartridges
  - 4. Rimless cartridges
  - 5. Rebated cartridges
- E. Bolt action receiver types
  - 1. Mauser
  - 2. Springfield
  - 3. Sako
  - 4. Remington
  - 5. Ruger
  - 6. Winchester
- F. Safety breeching
  - 1. Definition
  - 2. Measuring the action and bolt
  - 3. Bolt modifications
  - 4. Barrel shank modifications
  - 5. Setting headspace
- G. Barreling a bolt action receiver
  - 1. Set up lathe
  - 2. Thread barrel shank
  - 3. Chamber barrel
  - 4. Headspace barrel
  - 5. Turn outside contour
  - 6. Crown barrel

## V. Assignments

### A. Appropriate Readings

The students will be assigned readings from instructor handouts.

### B. Writing Assignments

The students 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 fabricating tools to help complete assignments.

## VI. Methods of Evaluation

The student will be evaluated on class participation and completion of laboratory 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

**IX. Discipline/s Assignment**

Gunsmithing

**X. Course Status**

Current Status: Active

Original Approval Date: 2/15/1988

Revised By: John Martin

Curriculum/Academic Standards Committee Revision Date: 05/21/2013

Instructional Program Review Date with no Revision: 03/25/2014