Dept & Nbr: WELD 57 Abbrv Title: Weld, Fab, & Projects **Full Title:** Weld, Fab, & Projects Discipline Assignment: Welding **Title 5 Category:** Associate Degree Applicable **Certificate:** Yes Units Max: 3.00 Min: 3.00 **Course Hours Per Week** Lecture 2 Lab 3 **Number of Weeks** 18.0 **Course Hours Total** Lecture 36.00 Lab 54.00 **Methods of Delivery** Distance Education - Hybrid Live Instruction **Selected Topic** No Grading Graded Option Only (ABCD-F) **Repeat Code** Non Repeatable/Non Activity Course (May be repeated two times with a grade of less than "P" or "C")

Basic Skills

Course is not a basic skills course.

Prerequisites

Recommended Preparation

Catalog Description

Designed for the accomplished welding student to gain welding fabrication and repair welding principles and skills. Also, construction of complex and useful projects.

Course Content

- I. Welding practices and principles
- II. Blueprint reading practices, symbols, and standards.
- III. Metal fabrication practices and principles.
- IV. Repair welding process.
- V. Assigned project fabrication.
- VI. Student choice of fabrication project.
- VII. Blue print production of project.

Methods of Instruction

- 1. Lecture presentations and class discussion. (Satisfies objectives 1, 2, 3)
- 2. Video viewing and class discussion. (Satisfies objectives 1, 2)
- 3. Instructor demonstration followed by student demonstration and instructor critique. (Satisfies objectives 1, 2, 3)
- 4. Homework, both reading and writing, assigned by instructor. (Satisfies objectives 1, 2)

Course Objectives

A. Define Čourse Objectives

- 1. Produce souind welds utilizing many various welding processes.
- 2. Fabricate complex and useful welded projects from blueprints.
- 3. Inspect and perform repair welding processes on existing welded items.

B. Critical Thinking Tasks/Assignments

Critical thinking assignments include(but are not limited to) the following:

Substantial Writing Assignments Including:

Computational or Non-Computational Problem Solving Demonstrations Including: Exam(s) Quizzes

Skill Demonstration Including

Objective Examinations Including

C. Methods of Evaluation

Substantial Writing Assignments

	None
Computational or Non-Computational Problem Solving Demonstrations	Exam(s) Quizzes
Skill Demonstration	Class Performance(s)
Objective Examinations	Multiple Choice True/False Matching Completion Short answer
Other	Attendance/Participation Observation
Additional assessment	

information (optional).

Basis for Grades

Problem - solving	20.0%
Skill demonstration	40.0%
Objectives examinations	20.0%
Attendance/participation	10.0%
Other: Observation	10.0%

Required Reading, Writing and Other Outside of Class Assignments

Study Skill Practice Required Reading Problem Solving Activity or exercise Observation or participation in an activity related to course content

Required Reading:

Required Writing:

Other Out of Class Assignments:

Texts/Materials

Textbooks

- 1. Bonhart. Welding, 5th ed. MCG, 2017, ISBN: 0073373869.
- 2. Sacks. Welding (workbook), 7th ed. MCG, 2017, ISBN: 125986989X.

Manuals

You have no manuals defined.

Periodicals

You have no periodicals defined.

Software

You have no software defined.

Other

You have no other defined.

Student Learning Outcomes

- 1. Inspect and perform repair welding processes on existing welded items.
 - Core Competency: Communication and Critical Thinking and Personal/Professional Development
 - Assessment Methods: Project or Presentation, Multiple Choice, Demonstration, Observation by instructors

• Rubric:

2. Students will fabricate complex and useful welded projects from blueprints.

- Core Competency: Communication and Critical Thinking and Personal/Professional Development
 - Assessment Methods: Project or Presentation, Multiple Choice, Demonstration, Observation by instructors
 - Rubric:

3. Students will produce sound welds utilizing many various welding processes.

- Core Competency: Communication and Critical Thinking and Personal/Professional Development
- Assessment Methods: Project or Presentation, Multiple Choice, Demonstration, Instructor performed visual, non-detuctive, and/or detructive tests.
- Rubric:

Curriculum Committee Approval Date:

Last Outline Revision Date: 05/11/2018