

WELD 0004 - WELDING OPERATOR ORIENTATION

Catalog Description

Prerequisite: Completion of WELD 2A and 5A with grades of "C" or better
Hours: 9 lecture

Description: Orientation course to prepare students for enrollment in WELD 84 (pass/no pass grading) (not transferable)

Course Student Learning Outcomes

- CSLO #1: Identify components of a mechanized welding system.
- CSLO #2: Define terms used in mechanized welding applications.
- CSLO #3: List the advantages of mechanized versus robotic versus manual welding methods.

Effective Term

Fall 2019

Course Type

Credit - Degree-applicable

Contact Hours

9

Outside of Class Hours

18

Total Student Learning Hours

27

Course Objectives

1. Explain how mechanized welding processes differ from other methods of welding.
2. Identify the advantages gained by automation.
3. Analyze the disadvantages that occur with mechanical methods.
4. Outline the terms used to identify the controls of the weld arc.
5. Review a procedure for the use of this type of welding equipment.

General Education Information

- Approved College Associate Degree GE Applicability
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

Articulation Information

Methods of Evaluation

- Objective Examinations
 - Example: 1. Written examination given at the conclusion of the class. Student will complete written examination. Example: T / F Increasing the transverse speed and not the dwell time will flatten the weld bead. 2. Student worksheet provided in the beginning of course, which the student is expected to complete and turn

in with their exam at the course conclusion. Example: A linear weaver will produce which of the following? a. Fillet weld b. Groove weld c. Surfacing

Repeatable

No

Methods of Instruction

- Lecture/Discussion

Lecture:

1. Instructor will present a PowerPoint as a way of leading a discussion on the welding industry use of mechanized welding.
2. The instructor will develop written information in the form of class handouts to provide student with specific knowledge of the use of the welding equipment. This material will then provide the basis for classroom lecture/discussions and help structure the material used in examinations.

Typical Out of Class Assignments

Reading Assignments

1. PowerPoint used with student worksheet. Student will read PowerPoint along with their worksheet.
2. Handouts provide resource terminology. Student assigned to read the makeup and set language as provided in handout.

Writing, Problem Solving or Performance

1. Student worksheet used to reference presented information.
2. Student will complete an examination of acquired knowledge gained during the orientation on the subject matter.

Other (Term projects, research papers, portfolios, etc.)

Required Materials

Other materials and-or supplies required of students that contribute to the cost of the course.

Note: No text is used, instructor-prepared handouts are presented.