

# WELD-135 INTRODUCTION TO METAL FABRICATION I 3 CREDITS

#### **SYLLABUS**

#### **CATALOG DESCRIPTION**

This class will be an introduction to general layout and fabrication techniques as related to structural welding. Emphasis will be on construction of small projects to tolerances using blueprints. A variety of welding processes will be used in the vertical up and overhead positions only.

Corequisites: WELD-133, WELD-134, WELD-136

Prerequisites: WELD-129, WELD-130, WELD-131, WELD-132

Semester Offered: Fall, Spring

# COMMON STUDENT LEARNING OUTCOMES

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

## **BROAD AND SPECIALIZED LEARNING**

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

#### CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

#### CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

## **EFFECTIVE COMMUNICATION**

Students will exchange ideas and information with clarity in multiple contexts.

# INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

## **INTEGRATING TECHNOLOGIES**

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

### COURSE LEARNING OUTCOMES

Upon successful completion of the course, the student will be able to...

1. Provide the student with the ability to fabricate projects.

2. Students will use sketches plus blueprints to create projects, procedures, and bill of materials for their projects.

## **SPECIFIC LEARNING OUTCOMES**

- 1. Define terms associated with metals.
- 2. Identify structural shapes and sizes.
- 3. Work from blueprints and construct various objects.
- 4. Safely work with power equipment used in metal fabrication.