



WELD-134-PLATE WELDING II 3 CREDITS

SYLLABUS

CATALOG DESCRIPTION

A continuation of Weld 133 with an emphasis on medium and heavy plate utilizing side bend tests in all positions using single vee groove and backing strips. The Shielded Metal Arc Welding (SMAW) process utilizing E6010 and E7018 electrodes will be used. Weld quality will be measured with visual and destructive testing methods.

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

Corequisites: WELD-133

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

1. Understand basic weld bead patterns and structural joints.
2. Utilize standard welding test procedures with multi-bead passes on medium to heavy plate in all positions.

3. Use advanced metal fabrication methods to prepare coupons for destructive testing.

Specific Learning Outcomes

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

1. Weld mild steel test plates in all positions that will pass a visual and side bend tests on ½" and thicker plate.
2. Demonstrate proficiency in the use of a scarfing tip, plate shear, and track torch.