

WELD-204 PIPE WELDING 1-G/2-G 3 CREDITS

SYLLABUS

CATALOG DESCRIPTION

Stresses the theory and practical application of 1-G and 2-G pipe welding. This course will develop individual skills in the fit-up and technique of welding pipe, using E-6010 electrodes and the Shielded Metal Arc Welding process.

Corequisites: WELD-205, WELD-206, WELD-207

Prerequisites: WELD-133, WELD-134, WELD-135, WELD-136

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. To provide the student with an understanding of 1-G and 2-G pipe welding using a variety of pipe sizes.

SPECIFIC LEARNING OUTCOMES

1. Perform the task of cutting, fit-up, tacking, and welding pipe joints in the 1-G and 2-G position, using SMAW process.
2. Weld pipe in 1-G and 2-G position using E-6010 electrodes, on 2", 3", and 4" pipe.
3. Weld then prepare test coupons that will withstand a root and face bend. Inspection will consist of both visual and destructive methods.