SAN JUAN COLLEGE
Success Matters

WELD-217 PIPE FABRICATION & LAYOUT I 4 CREDITS

SYLLABUS

CATALOG DESCRIPTION

Designed to correlate the several related courses of the program of study. Major emphasis given to special assignments which requires students to apply his/her knowledge of fabrication and layout methods in construction principles using pipe.

Prerequisites: WELD-204, WELD-205, WELD-206, WELD-207

Corequisites: WELD-208, WELD-209, WELD-218, WELD-229

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. Construction of mitered pipe joints using templates.

2. Use of formulas for pipe fabrication.
3. Layout techniques for piping systems.

SPECIFIC LEARNING OUTCOMES

1. Weld a 2-piece 90-degree, 3 piece, and 4 piece mitered tube turn.
2. Construct mitered pipe joints using various sizes of pipe with the use of templates
3. Weld a 2-piece 45 degree and 60-degree mitered tube turn.
4. Construct mitered joints at any given angle with the use of the pipe-fitter/pipe-welders handbook.