



WELD-229-TEMPLATE THEORY & CONSTRUCTION 3 CREDITS

SYLLABUS

CATALOG DESCRIPTION

Stresses template development for the use of structural steel shapes in Power plant construction and maintenance, Oil field fabrication, plus Industrial piping systems.

Co-requisites: WELD-208, WELD-209, WELD-217, WELD-218

Semester Offered: Spring, Summer

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. Template theory and construction.
2. Development and application of pipe templates.

Specific Learning Outcomes

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

1. Develop templates for pipe joints and connections.
2. Draw a two piece 90E, 3 piece, and 4 piece turn.
3. Draw a two piece 45E and 60E turn.
4. Draw 2", 3", and 4" branch and header.
5. Draw branch and header template - unequal diameters.
6. Draw eccentric branch and header templates.
7. Draw various lateral connections.
8. Draw a 60E true "Y".
9. Draw a blunt head on various sizes of pipe.
10. Draw an orange peel head on various size pipe.
11. Draw concentric and eccentric reducers.
12. Draw vent hoods - V-shaped and T-shaped.
13. Draw rolling offsets and welded combination offsets.