

WPT 111 - WELDING THEORY I

Course Description

First level lecture for all students enrolled in a Welding Technology Degree or Certificate Program. Course will cover theory and technique for Shielded Metal Arc Welding, Gas Metal Arc Welding, and Oxy Fuel Processes for welding, brazing, and cutting. Group 2 course.

Credit Hours

3

Contact Hours

3

Lecture Hours

3

Corequisites

WPT 112

General Education Outcomes supported by this course

Critical Thinking - Direct

Course Learning Outcomes

Knowledge:

- Understand and use terminology common to the welding trade as defined by the American Welding Society.
- Identify safety hazards.
- Name common industry Personal Protective Equipment.

Application:

- Apply knowledge of process fundamentals to hypothetical problems.
- Use formulae to calculate Wire Feed Speed, Volume, Mass, etc.

Integration:

- Incorporate Ohm's Law into their understanding of arc welding processes.

Human Dimension:

- Recognize the importance of weld quality on the health, safety, and welfare of the public.

Caring - Civic Learning:

- Be aware in their personal impact on the quality of the projects in which they are involved.

Learning How to Learn:

- Evaluate hypothetical applications and determine efficacy of different processes.