

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, 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.