

# WPT 113 - WELDING THEORY II

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## Course Description

Second level lecture for all students enrolled in a Welding Technology Degree or Certificate Program. Course will cover theory and technique for Pulsed Gas Metal Arc Welding, Flux Cored Arc Welding, Gas Tungsten Arc Welding, and Arc Cutting Processes. Group 2 course.

## Credit Hours

3

## Contact Hours

3

## Lecture Hours

3

## Required Prerequisites

WPT 111

## Corequisites

WPT 114

## General Education Outcomes supported by this course

Quantitative Reasoning

## Course Learning Outcomes

### Knowledge:

- Define terminology common to the welding trade as defined by the American Welding Society.
- Identify safety hazards.
- Describe common industry Personal Protective Equipment.

### Application:

- Apply knowledge of process fundamentals to hypothetical problems.
- Use formulae to calculate welding related values.

### Integration:

- Apply Ohm's Law when trouble shooting arc welding processes.

### Human Dimension:

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

### Caring - Civic Learning:

- Be cognizant of their personal impact on the quality of the projects.

### Learning How to Learn:

- Evaluate hypothetical applications to determine efficacy of different processes.