



# ILLINOIS VALLEY COMMUNITY COLLEGE

## COURSE OUTLINE

**DIVISION:** Workforce Development

**COURSE:** WSP 2207 OAW Gas Welding Vertical, Overhead, Mild Steel Pipe

Date: Summer 2022

Credit Hours: 2

*Complete all that apply or mark "None" where appropriate:*

Prerequisite(s): WSP 2206

Enrollment by assessment or other measure?  Yes  No  
If yes, please describe:

Corequisite(s): None

Pre- or Corequisite(s): None

Consent of Instructor:  Yes  No

Delivery Method:

<input checked="" type="checkbox"/> Lecture	1 Contact Hours (1 contact = 1 credit hour)
<input type="checkbox"/> Seminar	0 Contact Hours (1 contact = 1 credit hour)
<input checked="" type="checkbox"/> Lab	2 Contact Hours (2-3 contact = 1 credit hour)
<input type="checkbox"/> Clinical	0 Contact Hours (3 contact = 1 credit hour)
<input type="checkbox"/> Online	
<input type="checkbox"/> Blended	
<input type="checkbox"/> Virtual Class Meeting (VCM)	

Offered:  Fall  Spring  Summer

**CATALOG DESCRIPTION and IAI NUMBER (if applicable):**

This course includes the theory, safety and operation of oxyacetylene welding in flat plate in vertical up, overhead positions, as well as mild steel pipe in all positions.

## **ACCREDITATION STATEMENTS AND COURSE NOTES:**

None

## **COURSE TOPICS AND CONTENT REQUIREMENTS:**

Shop safety

Basic Printreading

Welding joints positions and symbols

Oxyfuel gas welding equipment

Oxyfuel gas welding

## **INSTRUCTIONAL METHODS:**

Classroom lecture, weld lab hands-on instruction

## **EVALUATION OF STUDENT ACHIEVEMENT:**

1. Read all material before coming to class
2. Participate in classroom and lab discussions and lectures.
3. Attend all class and lab sessions
4. Complete all required assignments, exercises, tasks, quizzes and tests.
5. Self-asses welds, maximize lab time.

The following grading scale will be used:

A= 90-100

B= 80-89

C= 70-79

D= 60-69

F= 0-59

## **INSTRUCTIONAL MATERIALS:**

### **Textbooks**

Modern Welding textbook and workbook, G-W, 12th edition

### **Resources**

Current Learning Management System (LMS) content available

Videos

Handouts

Lincoln Electric Welding technology center

Hobart institute of Welding technology

## **LEARNING OUTCOMES AND GOALS:**

### **Institutional Learning Outcomes**

- 1) Communication – to communicate effectively;
- 2) Inquiry – to apply critical, logical, creative, aesthetic, or quantitative analytical reasoning to formulate a judgement or conclusion;
- 3) Social Consciousness – to understand what it means to be a socially conscious person, locally and globally;
- 4) Responsibility – to recognize how personal choices affect self and society.

## **Course Outcomes and Competencies**

1. Safe use of all equipment as well as all safety guidelines will be discussed and utilized.
2. Understand and demonstrate safe work practices in the welding shop in regards to oxyacetylene welding equipment.
3. Demonstrate the ability to produce a surfacing weld.
4. Demonstrate the ability to produce a single pass fillet weld, in lap, tee and corner joints.
5. Demonstrate the ability to produce a butt weld and open root butt weld
6. Demonstrate the ability to produce a butt weld and open root butt, and open root vee groove weld in mild steel pipe.
7. Demonstrate the ability to conduct a Visual Examination of these welds to AWS criteria.