



ILLINOIS VALLEY COMMUNITY COLLEGE

COURSE OUTLINE

DIVISION: Workforce Development

COURSE: WSP 2206 OAW Gas Welding & Brazing, Flat and Horizontal

Date: Summer 2022

Credit Hours: 2

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

Prerequisite(s): None

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 and braze welding equipment in the production of flat and horizontal welds.

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
Braze welding and brazing

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 braze weld in lap, tee and corner joints.
6. Demonstrate the ability to produce a butt weld and open root butt weld.
7. Demonstrate the ability to conduct a Visual Examination of these welds to AWS criteria.