

COURSE OUTCOME MATRIX COURSE SYLLABUS PART 2 of 3

Course Number and Title	WL 203 FLUX-CORE ARC WELDING (FCAW)
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Credit Hours	3
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Course Description	The Flux-Core Arc Welding Unit (FCAW) is designed to teach the student the correct techniques to weld in all positions. Safety is stressed in the shop. Practice and training in the welding shop will develop the basic skill level necessary to produce quality welds in all positions and in different joint configurations.
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Prerequisite(s) and/or Corequisite(s)	
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Required Textbooks/References/Course Materials:

Modern Welding Lab Workbook	12th	Althouse, Andrew D.	Goodheart-Wilcox Co.	1635636876
Modern Welding	12th	Althouse, Andrew D.	Goodheart-Wilcox Co.	1635636868

General Education Outcomes	
1	Utilize written and verbal language to discuss and comprehend information, incorporating a variety of technologies, such as text, data, and images (written language, verbal language, and information technology).
2	Identify and interpret relevant information in order to formulate an opinion or conclusion (critical thinking).
3	Demonstrate and communicate computational methods and mathematical reasoning in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate) (quantitative literacy and fluency).
4	Communicate in appropriate ways with those who are culturally diverse (intercultural competence).

Program/Department Outcomes	
1	Prepare students to become safe and competent welders
2	Provide opportunities to possess communication and critical thinking skills
3	Demonstrate responsible professional conduct and behavior
4	Effectively communicate
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	Course Outcomes (CO)	Bloom's Domain for CO (C, A, P), Category, and Level	Program/ Department Outcome(s)	Written Language	Verbal Language	Information Technology	Critical Thinking	Quantitative Literacy and Fluency	Intercultural Competence
1	Ensure that safety aspects of welding processes and practices are understood and followed	C- Understanding (2)	1,2,3,4	0	1	0	1	0	0
2	Perform set up operations and shut down procedures for FCAW equipment	P- Imitate (1)	1,2,3,4	0	1	0	1	1	0
3	Demonstrate square groove and fillet weld, butt, lap, and tee joints in flat, horizontal, vertical, vertical up, and overhead position	P- Manipulate (2)	1,2,3,4	0	0	0	1	1	0
4	Apply FCAW theory to welds	C- Applying (3)	1,2,3,4	0	1	0	1	1	0
5	Perform troubleshooting on FCAW equipment	C- Analyzing (4)	1,2,3,4	0	1	0	1	1	0
6	Inspect welds for inconsistencies and irregularities	C- Understanding (2)	1,2,3,4	0	0	0	1	0	0
7									
8									
9									
10									

Bloom's Domain Legend

C = Cognitive
A = Affective
P = Psychomotor

General Education Outcome Legend

2 = Included and Measurable
1 = Introduced and/or Minimally Addressed and Not Measurable
0 = Not included

Approved: May 2021
Reviewed: November 11, 2021