

COURSE OUTCOME MATRIX COURSE SYLLABUS PART 2 of 3

Course Number and Title	WL 100 OXYACETYLENE WELDING OAW
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Credit Hours	4
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Course Description	This course will include cutting of ferrous and non-ferrous materials with manual, motor-driven, and oxy-fuel shape cutting equipment. Also included are plasma-arc cutting (PAC) and carbon-arc cutting (CAC-A). Safety, puddling, carrying the puddle, brazing, soldering, cutting equipment, and the basic fundamentals of cutting processes will be introduced. Students will be expected to produce acceptable oxy-fuel, PAC, and CAC-A cuts. This unit follows ANSI / AWS C4.2-90 an American National Standard.
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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	1,	1	0	1	0	0
2	Complete welding projects assigned by the instructor in various positions using oxyacetylene welding process	P- Perfect (3)	1,2,3,4	0	1	0	1	1	0
3	Describe the principles of OAW, OAC, PAC, and CAC	C- Remembering (1)	1,2,3,4	0	1	0	0	0	0
4	Demonstrate leadership and workplace readiness skills	P- Perfect (3)	1,2,3,4	0	1	0	0	0	0
5	Demonstrate welding skills by completing individual projects	P- Perfect (3)	1,2,3,4	0	0	0	1	1	0
6	Identify ferrous and nonferrous metals using various techniques	C- Applying (3)	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