

COURSE OUTCOME MATRIX COURSE SYLLABUS PART 2 of 3

Course Number and Title	WL 102 FUNDAMENTALS OF WELDING
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Credit Hours	4
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Course Description	An introduction to the fundamentals of equipment used in oxyacetylene welding and shielded metal arc welding, including welding and cutting safety, basic oxyacetylene welding and cutting, basic arc welding processes and basic metallurgy. The student will demonstrate safety procedures associated with equipment and identify ferrous and nonferrous materials.
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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	0	0	1	0	0
2	Demonstrate all methods of shielding	C- Understanding (2)	1,2,3,4	0	1	0	1	1	0
3	Understand and demonstrate SMAW practices and troubleshooting	P – Imitate (1)	1,2,3,4	0	1	0	1	1	0
4	Understand and demonstrate GMAW practices and troubleshooting	P – Imitate (1)	1,2,3,4	0	1	0	1	1	0
5	Understand and demonstrate FCAW practices and troubleshooting	P – Imitate (1)	1,2,3,4	0	1	0	1	1	0
6	Understand and demonstrate GTAW practices and troubleshooting	P – Imitate (1)	1,2,3,4	0	1	0	1	1	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