

COURSE OUTCOME MATRIX COURSE SYLLABUS PART 2 of 3

Course Number and Title	WL 275 (SPECIAL TOPICS IN WELDING) TORCHMATE CUTTING SYSTEM
-------------------------	---

Credit Hours	5
--------------	---

Course Description	This course presents classes in Welding which the College expects to offer only once or occasionally in response to specific community needs. The course may consist of seminars, specialized or individual instruction, and/or research in an area related to Welding. This hands-on basic course will provide instruction in the knowledge and skills necessary to perform basic function with Torchmate CAD/CAM software and CNC plasma table.
--------------------	---

Prerequisite(s) and/or Corequisite(s)	Requires permission from instructor.
---------------------------------------	--------------------------------------

Required Textbooks/References/Course Materials:
None.

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
5	
6	
7	
8	
9	
10	

	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	Understand personal safety and adhere to safe operating procedures while using Torchmate Hypertherm Powermax 85 plasma cutter torch table	C- Remembering (1)	1,2,3,4	0	1	0	1	1	0
2	Identify machine components and define their utility	C- Remembering (1)	1,2,3,4	0	1	0	1	0	0
3	Import and export graphic files, use the scan trace wizard, turn text into graphics, add bridges for cuts, and make a tool cutting path	C- Applying (3)	1,2,3,4	0	0	0	1	1	0
4	Design and edit basic shapes in the Torchmate CAD/CAM software application and generate a G-code	P- Manipulate (2)	1,2,3,4	0	1	0	1	1	0
5	Independently create a design and direct the performance of the plasma table to complete a cut out	P- Perfect (3)	1,2,3,4	0	1	0	1	1	0
6	Troubleshoot machine errors and malfunctions.	C- Analyzing (4)	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