

# COURSE OUTCOME MATRIX

## COURSE SYLLABUS

### PART 2 of 3

|                         |  |
|-------------------------|--|
| Course Number and Title | WL 210 COMMERCIAL AND INDUSTRIAL WELDING PRACTICES |
|-------------------------|--|

|              |   |
|--------------|---|
| Credit Hours | 3 |
|--------------|---|

|                    |   |
|--------------------|---|
| Course Description | Through classroom and/or lab/shop learning and assessment activities, students in this course will build skills through practices in simulated industrial processes and techniques including sketching, layout, and fabrication. Emphasizes maintenance, repair of worn or broken parts by special welding applications, field welding, and nondestructive testing. |
|--------------------|---|

|                                       |                                  |
|---------------------------------------|----------------------------------|
| Prerequisite(s) and/or Corequisite(s) | WL 102 – Fundamentals of Welding |
|---------------------------------------|----------------------------------|

**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   |
| 5                           |   |
| 6                           |   |
| 7                           |   |
| 8                           |   |
| 9                           |   |
| 10                          |   |

|    | Course Outcomes (CO)   | Bloom's Domain<br>for CO (C, A, P),<br>Category, and Level | Program/<br>Department<br>Outcome(s) | Written<br>Language | Verbal<br>Language | Information<br>Technology | Critical<br>Thinking | Quantitative<br>Literacy and<br>Fluency | Intercultural<br>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  | Identify steel rules, tapes, combination squares, framing squares, protectors, dividers, and trammel points        | C- Remembering (1)   | 1,2,3,4                              | 0                   | 1                  | 0                         | 1                    | 1                                       | 0                           |
| 3  | Properly sketch and layout drawing to be fabricated  | C- Creating (6)  | 1,2,3,4                              | 0                   | 1                  | 0                         | 1                    | 1                                       | 0                           |
| 4  | Select the proper tool for marking and the proper layout techniques for metal squaring                             | P- Imitate (1)   | 1,2,3,4                              | 0                   | 0                  | 0                         | 1                    | 1                                       | 0                           |
| 5  | Use the power press brake and learn proper bending sequences as well as operating and adjusting the power band saw | P- Manipulate (2)  | 1,2,3,4                              | 0                   | 0                  | 0                         | 0                    | 1                                       | 0                           |
| 6  | Interpret prints and fabricate assemblies and prepare bill of materials from print                                 | C- Applying (3)  | 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  
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