

MASTER COURSE OUTLINE

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Date: August 2013

COURSE TITLE Welding Process III

GENERAL COURSE INFORMATION

Dept.: WLD CIP Code: 48.0508 Credits: 3/6 Total Contact Hrs Per Qtr.: 66/132 Lecture Hrs: Lab Hrs:66/132 Distribution Designation:

Course Num: 131 Intent Code: 21

(Formerly:) Program Code: 814

Other Hrs:

COURSE DESCRIPTION (as it will appear in the catalog)

Using E-7018 electrodes, students weld corner joints, groove plates in all positions and ASME and WABO performance certification tests. Students must complete all 6 credits of WLD 131 prior to enrolling in more advanced welding classes.

PREREQUISITES

6 credits of WLD 121

TEXTBOOK GUIDELINES

Text and materials as decided by welding faculty. (Example: Modern Welding Technology by Howard Cary)

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills.

1. Passing a variety of low-hydrogen tests, to a variety of codes.

INSTITUTIONAL OUTCOMES

COURSE CONTENT OUTLINE

At the completion or the course, the student will display the skills to perform the following:

- 1. Closed inside outside 90 degree corner, horizontal position with E7018 : 1/8" root, 5/32" fill on ¾"x1 ¼"x8" plate or approved substitute material.
- 2. Closed inside outside corner joint, Vertical position
- 3. Closed inside outside corner joint, Overhead position
- 4. Plate, single V 30 degree bevel, with backing, horizontal position, on $\frac{3}{2}x4^{2}x4^{2}$ plate or approved substitute material.
- 5. Plate, single V with backing, vertical position, on ³/₄"x4"x8" plate
- 6. Plate, single V with backing, overhead position, on ³/₄"x4"x8" plate
- 7. ASME ¾" plate test 2G,3G,4G
- 8. Plate single V 22.5 degree, with backing, vertical position
- 9. Plate single V 22.5 degree, with backing, overhead position
- 10. WABO 3G,4G certification test (optional)

DEPARTMENTAL GUIDELINES (optional)

Grades will be calculated as follows:

50% Based on completing all course competencies.

50% Based on Lab Participation, Cleanup on a daily basis, and following ALL Safety rules.

The grade awarded for the class is as follows:

95-10	0 4.0	86	3.1	77	2.2	68	1.3
94	3.9	85	3.0	76	2.1	67	1.2
93	3.8	84	2.9	75	2.0	66	1.1
92	3.7	83	2.8	74	1.9	65	1.0
91	3.6	82	2.7	73	1.8	60-64	0.7
90	3.5	81	5.6	72	1.7	0-59	0
89	3.4	80	2.5	71	1.6		
88	3.3	79	2.4	70	1.5		
87	3.2	78	2.3	69	1.4		

DIVISION CHAIR APPROVAL

DATE