



## MASTER COURSE OUTLINE

Prepared By: Shawn McDaniel

Date: August 2013

## COURSE TITLE

Submerged Arc Welding

## GENERAL COURSE INFORMATION

Dept.: WLD

Course Num: 244

(Formerly:)

CIP Code: 48.0508

Intent Code: 21

Program Code: 814

Credits: 3

Total Contact Hrs Per Qtr.: 66

Lecture Hrs:

Lab Hrs:66

Other Hrs:

Distribution Designation:

## COURSE DESCRIPTION (as it will appear in the catalog)

This course focuses on student learning of submerged arc welding process which entails an arc that takes place beneath a bed of granular flux. This is a high deposition industrial orientated welding process that is used to manufacture light to heavy weldments.

## PREREQUISITES

WLD 242 or Instructor Permission

## 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. The student will be proficient in applying the submerged arc welding process used within industrial settings.

## INSTITUTIONAL OUTCOMES

## COURSE CONTENT OUTLINE

At the completion of the course, the student will have the skills to perform the following:

- Generate weld procedures for submerged arc welding
- Weld plate joints
- Weld pipe circumferential welds
- Weld fillet joints
- Qualification testing
- WABO certification testing (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:

95-100	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		

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**DIVISION CHAIR APPROVAL**

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**DATE**