



## MASTER COURSE OUTLINE

Prepared By: Shawn McDaniel

Date: August 2013

## COURSE TITLE

Structural Welding I

## GENERAL COURSE INFORMATION

Dept.: WLD

Course Num: 242

(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)

An introductory course focusing on fabrication of structural weldments utilizing shielded metal arc welding and flux cored arc welding on structural connections

## PREREQUISITES

WLD 212

## TEXTBOOK GUIDELINES

Text and materials as decided by welding faculty. (Example: *Flux cored Arc Welding Handbook* by William Minnick)

## COURSE LEARNING OUTCOMES

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

1. Proficient in welding structural weldments with both Shielded Metal Arc and self-shielded Flux Core Arc welding on a variety of structural connections.

## INSTITUTIONAL OUTCOMES

## COURSE CONTENT OUTLINE

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

- Column splicing
- Beam to column connections
- Other beam connections
- Welding gussets
- Beam preparation

## 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		

---

**DIVISION CHAIR APPROVAL**

---

**DATE**