

MASTER COURSE OUTLINE

Prepared By: Shawn McDaniel Date: August 2013

COURSE TITLE

Welding Metallurgy

GENERAL COURSE INFORMATION

Dept.: WLD Course Num: 207 (Formerly:)

CIP Code: 48.0508 Intent Code: 21 Program Code: 814

Credits: 4

Total Contact Hrs Per Qtr.: 55

Lecture Hrs:22 Lab Hrs:22 Other Hrs:

Distribution Designation:

COURSE DESCRIPTION (as it will appear in the catalog)

An introduction to metallurgy. Ferrous and nonferrous metals, alloys and their groupings will be covered. A number of weld quality concerns and techniques will also be covered.

PREREQUISITES

WLD 206 or Instructor Permission

TEXTBOOK GUIDELINES

Text and materials as decided by welding faculty. (Example: Modern Welding Technology 6th Ed., By Howard Cary)

COURSE LEARNING OUTCOMES

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

At the conclusion of the class the students will have an understanding of:

- 1. Materials
- 2. Practical applications
- 3. Steel metallurgy
- 4. Properties of metals
- 5. Metallic structures
- 6. Temper conditions
- 7. Nonferrous metals
- 8. Dissimilar metals
- 9. Weld challenges and techniques to address each

INSTITUTIONAL OUTCOMES

COURSE CONTENT OUTLINE

DEPARTMENTAL GUIDELINES (optional)

There will be four major tests during the quarter. These tests will be 2/3 of your total grade for the class.

Projects, assignments, and review questions will make up the final 1/3 of your grade.

Tests, projects, assignments, and review questions will be scored on a point basis with a percentage of points for your final grade.

The grade awarded for the class is as follows:

95-100 4.0 86 3.1 77 2.2 68	3 1.3
94 3.9 85 3.0 76 2.1 67	7 1.2
93 3.8 84 2.9 75 2.0 66	5 1.1
92 3.7 83 2.8 74 1.9 65	5 1.0
91 3.6 82 2.7 73 1.8 60	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	