



MASTER COURSE OUTLINE

Prepared By: Shawn McDaniel

Date: December 2005

COURSE TITLE

Pipe Welding II

GENERAL COURSE INFORMATION

Dept.: WLD

Course Num: 283

(Formerly:)

CIP Code: 48.0508

Intent Code: 21

Program Code: 814

Credits: 3/6

Total Contact Hrs Per Qtr.: 66/132

Lecture Hrs:

Lab Hrs:66/132

Other Hrs:

Distribution Designation:

COURSE DESCRIPTION (as it will appear in the catalog)

Students will enhance carbon steel pipe welding skills in the 1G, 2G, 5G, and 6G positions using E-6010 and E-7018 electrodes with schedule 60, 80, 100, and 120 pipes and various other sizes of pipes.

PREREQUISITES

WLD 281

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. For each student to be able to weld open root pipe welds in 1G, 2G, 5G, and 6G positions using E-6010 for root pass and E-7018 for multiple passes. Each student should be ready to pass E-7018 certification test.
2. Upon successful completion of the course, the student will be able to weld various sizes and thicknesses of pipes in all positions using E-6010 and E-7018 electrodes to meet AWS, API and AMSE standards.

INSTITUTIONAL OUTCOMES

COURSE CONTENT OUTLINE

1. 8" Schedule 80 Pipe 1G. E-6010 1/8" root, with E-7010 1/8" fillup
2. 8" Schedule 80 Pipe, 5G
3. 8" Schedule 80 Pipe, 2G
4. 8" Schedule 80 Pipe, 6G
5. 6" Schedule 120 Pipe, 5G
6. 6" Schedule 120 Pipe, 2G
7. 6" Schedule 120 Pipe, 6G
8. 4" Schedule 100 Pipe, 5G
9. 4" Schedule 100 Pipe, 2G
10. 4" Schedule 100 Pipe, 6G
11. A.S.M.E. E-6010 root, E-7018 fillup, 2G, 5G or 6G Test using 8" schedule 80 pipe.

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	2.6	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