MASTER COURSE OUTLINE

Prepared By: Shawn McDaniel | Date: December 2005

COURSE TITLE

Pipe Welding I

GENERAL COURSE INFORMATION

Dept.: WLD	Course Num: 281	(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 be introduced to pipe welding in the 1G, 2G, 5G, and 6G positions using E-6010 electrodes with schedule 60, 80, 100, 120 and various size pipes.

PREREQUISITES

WLD 131

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. Each student will be able to weld open root pipe welds in 1G, 2G, 5G, and 6G positions with both uphill and downhill methods using E-6010 electrodes.
2. The student will be able to weld 8", 6" and 4" pipe in all positions in accordance with ASME guidelines.

INSTITUTIONAL OUTCOMES

COURSE CONTENT OUTLINE

1. Schedule 80 Pipe 1G. Using E-6010 1/8" root, 5/32" fillup
2. 8" Schedule 80 Pipe, 5G
3. 8" Schedule 80 Pipe, 2G
4. 8" Schedule, 6G
5. 6" Schedule 120 or 100 Pipe, 5G
6. 6" Schedule 120 or 100 Pipe, 2G
7. 6" Schedule 120 or 100 Pipe, 6G
8. 4" Schedule 120, 5G
9. 4" Schedule 120 Pipe, 2G
10. 4" Schedule 120 Pipe, 6G
11. A.S.M.E. E-6010 2G, 5G, or 6G Test
    Using 8" Schedule 80 or 6" Schedule 120 pipe

Before taking the ASME certification test, 5G backup Ring method and 1G, 5G downhill method experimental practices are given.

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**