



MASTER COURSE OUTLINE

Prepared By: Shawn McDaniel

Date: December 2005

COURSE TITLE

Pipe Welding III

GENERAL COURSE INFORMATION

Dept.: WLD

Course Num: 285

(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)

This course focuses on pipe welding in the 1G, 2G, 5G, and 6G positions using E-6010 and E-7018 rods and a combination of G.T.A.W. and S.M.A.W process with schedule 40, 60, 80, 100, 120, and various other sizes of pipes.

PREREQUISITES

WLD 283

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 GTAW and E-7018 combination weld on pipes of various sizes. The student that meets qualification level of proficiency will be tested for certification.
2. Upon successful completion of the course, the student will be able to weld a variety of pipe sizes with GTAW process in combination with E-7018 fillers in all positions in accordance with AWS standards for weld acceptability.

INSTITUTIONAL OUTCOMES

COURSE CONTENT OUTLINE

1. 8" schedule 80 1G 1st, 2nd pass GTAW process with E-7018 1/8" electrode fillup.
2. 8" schedule 80 pipe, 5G
3. 8" schedule 80 pipe, 2G
4. 8" schedule 80 pipe, 6G
5. 6" schedule 100 pipe, 5G
6. 6" schedule 100 pipe, 2G
7. 6" schedule 100 pipe, 6G
8. 4" schedule 80 pipe, 5G
9. 4" schedule 80 pipe, 2G
10. 4" schedule 80 pipe, 6G

11. A.S.M.E. and GTAW, E-7018 combination test, using 8" schedule 80 pipe 2G, 5G, or 6G

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