

# Course Syllabus

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**NOTE:** This syllabus is subject to change during the semester. Please check this syllabus on a regular basis for any updates.

**Department** : Welding Technology  
**Course Title** : Intro. to Pipe Welding  
**Section Name** : WLDG\_1435\_ 6245  
**Start Date** : 01/17/2012  
**End Date** : 05/11/2012  
**Modality** : FACE-TO-FACE  
**Credits** : 4 (2-6)

## *Instructor Information*

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**Name** : James Mosman  
**OC Email** : jmosman@odessa.edu  
**OC Phone #** : (432) 335-6474

## **Course Description**

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An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes.

## **Prerequisites/Corequisites**

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Prerequisite: WLDG 1421 or instructor's consent

## [Scans](#)

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4, 6, 7, 8, 9

## **Course Objectives**

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The student will describe equipment and required pipe preparation and perform 1G and 2G welds using various electrodes. Student will be required to evaluate their performance abilities to troubleshoot potential problems. Student will learn to decipher coding system for AWS and proper use of available materials and equipment.

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### **ACADEMIC ETHICS:**

**Each student is expected to do their own work on the assignments, and take tests without outside assistance. If unethical behaviour is detected, by Odessa College Policy, all parties involved may either be denied credit for the project, or at the instructor's discretion, the student(s) may be dropped from the class. A report will be made to the department chairman for further action as deemed necessary by the department chair.**

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### **Required Readings/Materials**

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a) You must purchase the following **required** readings/materials:

Text required. Pipe Welding Procedures ISBN 0---8311---3141---1

1. Welding Hood with shade 10 or darker lens or auto-dark lens
2. Welding Cap
3. Welding Gloves
4. Safety Glasses or Goggles or Face Shield
5. Cutting Goggles or Face Shield
6. Spark striker
7. Chipping hammer
8. Hand Wire Brush
9. Stainless Steel Hand Wire Brush
10. MIG Pliers / Welpers
11. Combination Square

All students must have equipment prior to 3<sup>rd</sup> class period or arrangements made with instructor.

### **Course Requirements (Lectures, Assignments and Assessments)**

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- 1. Take all tests**
  - 2. Complete all homework assignments**
  - 3. Complete all welds in assigned order**
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### Summary of Assignments & Activities

\* NOTE: The due dates are subject to change. Please check this syllabus on a regular basis for any updates.

Item(Name)	Type	Description
1. Class Introduction, Safety Orientation	Lecture/Video/Exam	Students will be introduced to welding program, lab safety, class requirements. Safety Exam.
2. Chap 1	Lecture/Lab/	Overview of Pipe welding processes.
3. Chap 2, Pipe to Plate	Lecture/Lab/	Review SMAW, Cut material for 2F welds
4. Pipe to Plate	Lab	2 F Welds
5. Chap 3, Pipe to Plate	Lecture/Lab/	Heat Input of welding, 3F welds
6. Pipe to Plate	Lab	3F welds
7. Pipe to Plate	Lab	4F welds
8. Review/ Pipe to Plate	Lecture/Lab	Review section 1/ Complete Pipe to Plate welds
9. Complete section 1 welds/ Exam 1	Lecture/Lab/Exam	Complete section 1
10. Chap 8, 1G	Lecture/Lab	Welding thin wall pipe, cut and fit for 1G
11. 1G welding	Lab	Weld pipe in 1G position
12. Chap 5, 1G welding	Lecture/Lab	Intermediate and cover passes, 1G test
13. 1G test	Lab	Complete 1G pipe weld test
14. Chap 9, 2G welding	Lecture/Lab	Horizontal pipe welding, 2G
15. 2G welding	Lab	Weld pipe in 2G position
16. 2G test	Lab	Complete 2G pipe weld test
17. Review Section 2	Lecture/Lab	Complete 2G welding
18. Section 2 Exam	Lab/Exam	Complete Section 2 welds
19. 5G welding	Lecture/Lab	Weld pipe in 5G position
20. Chap 7, 5G welding	Lecture/Lab	Pipe welding defects, 5G welding
21. 5G welding	Lab	Weld pipe in 5G position
22. 5G welding	Lab	Weld pipe in 5G position
23. Chap 8, 5G welding	Lecture/Lab	Pipe Fit-up, Begin 5G test
24. 5G test	Lab	Complete 5G pipe test

25. Chap 9, 6G welding	Lecture/Lab	Codes & Qualifications, Weld pipe in 6G position
26. 6G welding	Lab	Weld pipe in 6G position
27. 6G welding	Lab	Weld pipe in 6G position
28. 6G welding	Lab	Test in 6G position
29. 6G welding	Lab	Test in 6G position
30. Final Review & Clean-up	Lecture /Lab	Final Review. Clean-up Lab.
31. Final Exam	Exam	Take final comprehensive written exam.

## Grading Policy

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### METHOD OF EVALUATION:

Homework	10%
Section Quiz	20%
Lab Work	50%
Professionalism	10%
Final Exam	<u>10%</u>
Total Grade	100%

90 – 100 = A

80 – 89 = B

70 – 79 = C

61 – 69 = D

Below 61 = F

## Special Needs

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Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

## Learning Resource Center (Library)

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The Library, known as the [Learning Resources Center](#), provides research assistance via the [LRC's catalog \(print books, videos, e-books\)](#) and [databases \(journal and magazine articles\)](#). [Research guides](#) covering specific subject areas, [tutorials](#), and the "[Ask a Librarian](#)" service provide additional help.

## Student E-mail

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Please access your [Odessa College Student E-mail](#), by following the link to either set up or update your account: <http://www.odessa.edu/gmail/>. **All assignments or correspondence will be submitted using your Odessa College email.**

## Student Portal

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Please access your [Odessa College Student E-mail](#), by following the link to either set up or update your account: <http://www.odessa.edu/gmail/>. **All assignments or correspondence will be submitted using your Odessa College email.**

## Technical Support

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For Blackboard username and password help and for help accessing your online course availability and student email account contact the Student Success Center at 432-335-6878 or online at [https://www.odessa.edu/dept/ssc/helpdesk\\_form.htm](https://www.odessa.edu/dept/ssc/helpdesk_form.htm).

## Important School Policies

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For information regarding student support services, academic dishonesty, disciplinary actions, special accommodations, or student's and instructors' right to academic freedom can be found in the [Odessa College Student Handbook](#).