Course Syllabus

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: Advanced Layout and Fabrication

Section Name: WLDG_2435_ 6135

 Start Date
 : 08/27/2012

 End Date
 : 12/11/2012

 Modality
 : FACE-TO-FACE

Credits : 4 (2-6)

Instructor Information

Name : James Mosman

OC Email : jmosman@odessa.edu

OC Phone #: (432) 335-6474

Course Description

A continuation of the layout and fabrication course which covers production and fabrication related to the welding industry. Major emphasis is on application of fabrication and layout skills as used in construction.

Prerequisites/Corequisites

Prerequisite or Corequisites: WLDG 1417 or consent of Department Chair

ICO's

1, 2, 3, 4

Course Objectives

The student will identify welding symbols; identify and select measuring instruments and tools for fabricating projects; recognize correct layout and fabrication terminology; and identify structural shapes and materials. The student will be responsible for choosing the proper procedures, tools and equipment to perform assigned actions and be able to explain these actions. The student will apply appropriate techniques of fabrication; design welding projects; prepare drawings and produce templates. The student will apply layout offsets; take offs; bills of materials; and apply mathematical concepts in the construction

of projects. This is a capstone course for the Fitter Welder Level I certificate and the Lead Welding Machine Operator Level II certificate.

Emphasis is placed on student's ability to acquire and apply new knowledge and skills.

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.

Required Readings/Materials

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

Welding Print Reading ISBN---978---1---60525---911---6
The Pipe Fitter's and Pipe Welder's Handbook ISBN----0---02---802500---8

- 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. Combination Square

All students must have equipment by the 3rd class period or arrangements made with instructor.

- b) You are encouraged to buy the following optional books/materials
 - 1. Welding Leather sleeves
 - 2. 25 foot tape measure
 - 3. 2nd pair of Welding Gloves

Course Requirements (Lectures, Assignments and Assessments)

- 1. Take all tests
- 2. Complete all homework assignments
- 3. Complete all welds in assigned order

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)	Туре	Description	
Class Introduction, Safety Orientation	Lecture/Video/	Students will be introduced to welding program, lab safety, class requirements.	
2. Oxy-fuel welding and cutting, Safety Exam	Lecture/Lab/ Exam	Review Oxy-fuel processes and Safety Exam	
3. Project Orientation/ Plasma Cutting	Lecture/Lab/	Review PAC and safety.	
4. Begin Project 1/ Review Unit 5	Lecture/Lab	Begin Project 1 plan and print. Unit 5 - Understanding Prints	
5. Project 1/ Review Unit 6 and 7	Lecture/Lab	Develop list of materials and submit for approval. Review Unit 6 and 7 – Types of Prints and Print Format	
6. Project 1	Lab	Construct Project	
7. Project 1	Lab	Construct Project	
8. Project 1	Lab	Construct Project	
9. Project 1	Lab	Complete Project 1	
10. Project 2	Lecture/ Lab	Begin Project 2 plan.	
11. Project 2	Lab	Submit Project for approval Test on Units 5, 6, & 7	
12. Project 2/ Unit 21	Lecture	Construct Project Unit 21 – Pipe Welding Symbols	
13. Project 2	Lab	Construct Project	
14. Project 2	Lab	Construct Project	

15. Project 2	Lab	Complete Project	
16. Project 3/ Unit 24	Lecture/ Lab	Begin Project 3 plan. Unit 24 – Examining and Testing Welds	
17. Project 3	Lab	Submit Project 3 for approval	
18. Project 3	Lab	Construct Project	
19. Project 3	Lecture/Lab	Construct Project	
20. Project 3	Lab	Construct Project	
21. Project 3	Lab	Construct Project	
22. Project 3	Lecture/Lab	Construct Project	
23. Project 3	Lab	Complete Project 3	
24. Project 4	Lecture	Begin Project 4 plan	
25. Project 4	Exam	Submit Project 4 for approval. Test on Units 21 and 24	
26. Project 4	Lecture/Lab	Construct Project	
27. Project 4	Lab	Construct Project	
28. Project 4	Lab	Construct Project	
29. Project 4	Lab	Complete Project 4	
30. Final Review & Clean-up	Lecture /Lab	Final Review. Clean-up Lab.	
31. Final Exam	Exam	Take final comprehensive written exam.	

Grading Policy

METHOD OF EVALUATION:

Homework Avg.	20%
Section Quiz Total	20%
Lab Projects	40%
Professionalism	10%
Final Exam	10%
Total Grade	100%

$$90 - 100 = A$$
 $80 - 89 = B$ $70 - 79 = C$
 $61 - 69 = D$ Below $61 = F$

Special Needs

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)

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

Student E-mail

Please access your <u>Odessa College Student E-mail</u>, 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

Please access your <u>Odessa College Student E-mail</u>, 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

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

Important School Policies

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.

**The Odessa College Student Success Coaches will help you stay focused and on track to complete your educational goals. If an instructor sees that you might need additional help or success coaching, he or she may submit a Retention Alert or a Starfish Alert. A Student Success Coach will contact you to work toward a solution. **

Expectations for Engagement – Online Learning

To help make the web-based learning experience fulfilling and rewarding, the following Expectations for Engagement provide the parameters for reasonable engagement between students and instructors for the online learning environment. Students and instructors are welcome to exceed these requirements.

Reasonable Expectations of Engagement for Instructors

- 1. As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will
 - provided my contact information at the beginning of the syllabus;
 - respond to all messages within 24 hours if received Monday through Thursday and within 48 hours if received Friday through Sunday; and,
 - notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of emergencies during the time I'm unavailable.
- 2. As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will
 - provide clear information about grading policies and assignment requirements in the course syllabus, and
 - communicate any changes to assignments and/or to the course calendar to students as quickly as possible.
- 3. As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will
 - post grades for discussion postings within one week of the discussion thread closing.
 - provide grades for major assignments within 2 weeks of the due date or at least 3 days before the next major assignment is due, whichever comes first.

Reasonable Expectations of Engagement for Students

- 1. As a student, I understand that I am responsible for keeping up with the course. To help with this, I will
 - line up alternative computer and internet access in case my primary computer crashes or my internet services is unavailable;
 - recognize that the college provides free wi-fi and computer labs during regular campus hours to help me with accessing my course; and,

- understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my equipment or service is unreliable.
- 2. As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to
 - getting "kicked off" of the system during tests or guizzes;
 - · having trouble submitting assignments; and
 - dealing with a traumatic personal event.
- 3. As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will
 - seek out help from my instructor and/or from tutors;
 - · ask questions if I don't understand; and,
 - access my course several times during the week to keep up with assignments and announcements.

Expectations for Engagement – Face to Face Learning

To help make the learning experience fulfilling and rewarding, the following Expectations for Engagement provide the parameters for reasonable engagement between students and instructors for the learning environment. Students and instructors are welcome to exceed these requirements.

Reasonable Expectations of Engagement for Instructors

- 1. As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will
 - provided my contact information at the beginning of the syllabus;
 - respond to all messages in a timely manner through telephone, email, or next classroom contact; and,
 - notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of emergencies during the time I'm unavailable.
- 2. As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will
 - provide clear information about grading policies and assignment requirements in the course syllabus, and
 - communicate any changes to assignments and/or to the course calendar to students as quickly as possible.
- 3. As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will
 - return classroom activities and homework within one week of the due date and
 - provide grades for major assignments within 2 weeks of the due date or at least 3 days before the next major assignment is due, whichever comes first.

Reasonable Expectations of Engagement for Students

- 1. As a student, I understand that I am responsible for keeping up with the course. To help with this, I will
 - attend the course regularly and line up alternative transportation in case my primary means of transportation is unavailable;
 - recognize that the college provides free wi-fi, computer labs, and library resources during regular campus hours to help me with completing my assignments; and,
 - understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my personal computer equipment or internet service is unreliable.
- 2. As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to,
 - missing class when a major test is planned or a major assignment is due;
 - · having trouble submitting assignments;
 - · dealing with a traumatic personal event; and,
 - having my work or childcare schedule changed so that my classroom attendance is affected.
- 3. As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will
 - · seek out help from my instructor and/or from tutors;
 - ask questions if I don't understand; and,
 - attend class regularly to keep up with assignments and announcements.

The SEI process for face-to-face and online courses is scheduled for the week of November 26th.