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| **Weld 268**  **Advanced independent projects**  **COURSE SYLLABUS** | | |
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| Instructor: | Martin Wolfe | Term: | Fall 2014 | |
| Office: | T145 | Class Meeting Days: | Tuesday | |
| Phone: | 708-709-7807 | Class Meeting Hours: | 8:00am–12:40pm | |
| E-Mail: | mwolfe@prairiestate.edu | Class Location: | T186 | |
| Website: | [www.prairiestate.edu](http://www.prairiestate.edu) | Lab Location: | T165 Welding lab | |
| Office Hours: | Tues, Wed, Thurs, 1-5pm |  |  | |
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**Welcome!**

Thank you for taking the time to enroll in the program as it will be one of the most rewarding processes that you will go through. I look forward to an exciting semester which will challenge you and be a lot of fun at the same time.

**Course Overview**

Independent projects as directed by professor utilizing all welding and fabrication skills. Principles and techniques of steel layout and fabrication welding. Includes measurement, print reading review,

Layout tools, layout techniques, hand-held power tool safety and use, large power tool safety and use, drawing interpretation, structural methods, and welding projects.

**Course Prerequisites**

Weld 215

**Course Credits**

3 credit hours

**Required Texts and Materials**

Text: Welding, principles and applications; Jeffus, Larry

**Expected competencies/outcomes**

At the completion of this course, the students will, given the appropriate special tools and equipment, be able to safely perform the attached list of tasks with a degree of proficiency and in a period of time deemed satisfactory by the instructor.

**Disability Access:**

Prairie State College is committed to providing reasonable accommodations for all persons with disabilities. This syllabus is available in alternate formats upon request. Students who need accommodations must be registered with Student Disability Services,

**Attendance Policy**: Attendance is expected and records will be maintained. Consistent attendance is essential for success in this course. Tardiness and leaving class/lab early will also be noted. People entering the classroom late should take the instructor and students into consideration. Poor attendance not only denies the individual student instruction but also denies the class of the unique perspective of that student. For these reasons, on the third absence, the final letter grade will be lowered one full letter grade. Each additional two absences will lower your final grade an additional letter.

**Professionalism Policy**:

Per college policy and classroom etiquette; mobile phones, iPods, *etc*. **must be silenced** during all classroom and lab lectures. Those not heeding this rule will be asked to leave the classroom/lab immediately so as to not disrupt the learning environment. Please arrive on time for all class meetings. Students who habitually disturb the class by talking, arriving late, *etc*., and have been warned may suffer a reduction in their final class grade.

**Academic Conduct Policy**:

Academic dishonesty in any form will not be tolerated. If you are uncertain as to what constitutes academic dishonesty. As in all College courses, The student handbook Rules of Conduct will be applied. Violations of these rules will result in a record of the infraction being placed in your file and receiving a zero on the work in question AT A MINIMUM. At the instructor’s discretion, you may also receive a failing grade for the course. Confirmation of such incidents can also result in expulsion from the College

**Methods of Evaluation:**

The norm expected in the workplace is “Excellence”. The same is expected of your work in this course.

Grading criteria:

Quizzes 15% Excellent performance (your best) earns you an A

Homework 10% Good performance (moderate effort) earns you a B

Midterm Exam 15% Mediocre performance (little effort) earns you a C

Final Exam 20% Poor performance (minimum effort) earns you a D

Attendance/Classroom 10%

Participation

Shop/Lab 30%

**Course goals and objectives:**

**Upon successful completion of the course, the student will be able to:**

1. Describe project objectives, plans, specifications, and materials.
2. Demonstrate safety and welding procedures to complete the project
3. Identify necessary welding processes, tools, and set-up used in completing the project.
4. Use SMAW, GMAW, or GTAW per blueprint requirements or certification specifications to complete the project.

**Detailed topical course outline:**

1. Project Objectives
   1. Plans / Specifications
   2. Materials
2. Procedures and Safety Practices
   1. Required welding process
   2. Oxyacetylene
   3. Grinder
   4. Other equipment
3. Welding Processes and Set-up for the Project
   1. SMAW, GMAW, GTAW
   2. Equipment set-up
   3. Electrode type and amperage settings
   4. Other equipment and tools
4. Project Completion
   1. Blueprint requirements
   2. Inspection
   3. Certification (Code) specifications

Chapters covered:

Chapters 18-19-21-23-25-27-29

Other material, handouts and projects will be handed out in class. Final grading will be the completion of class project and drawings.