



Mulvane High School Production Welding Processes I

Instructor: Mr. Dieker

Course Description:

Production Welding Processes I- This is an introductory course for students, which covers many aspects of welding fabrication. Students will be exposed to oxyfuel, ARC, and MIG welding while learning the various techniques required to weld multiple joints. Students will also be introduced to a variety of cutting techniques using oxyfuel, plasma, and CNC plasma cutting equipment. Students will use a wide variety of metalworking machines, including but not limited to the lathe, mill, sheet metal breaks, and various hand tools.

Text:

Victor E. Repp (1994). Metalwork Technology and Practice. 9th Edition, Glencoe/McGraw-Hill, Peoria, Illinois.

Course Objectives:

Production Welding Processes I is designed to allow the student an opportunity to learn the different aspects of welding and metal working through hands on laboratory work. Written assignments will be completed weekly which will explore different processes used in the welding and metal working industry.

As a basic welding and metal working class it has as its objective the following:

1. To provide an introduction to the area of welding and metals.
2. To provide an opportunity for the development of skills, a degree of “know how” and an understanding of various welding and metal working techniques.
3. To provide information that will aid in the selection and application of various materials in the welding and metal work fields.
4. To ensure the student understands and practices safe work habits.

Course Content: - Through the use of class discussions, laboratory activities and testing, instructional information of the following topics will be presented.

1. Safety practices in metal working.
2. Sheet metal.
3. Bench metal.
4. Lathe.

5. Mill.
6. Welding (Oxyfuel, ARC, MIG, TIG)

Activities: - To accomplish the course objectives, projects and or assignments from each area must be completed. Along with this lab work, text assignments and study questions will be completed regularly.

Evaluation: - Evaluations will be made from the following.

1. **Quizzes and Assignments** – Quizzes and assignments will be given each week covering the information given during the week and the questions completed during the week. Quizzes will generally be 10 short answer questions.
2. **Mid-term Exam** – The mid term exam will be given during the eighth week of classes.
3. **Final Exam** – The final exam will be practical and each student will need to complete four tasks which will be randomly selected. All tasks must be completed and the student must clean up to receive full credit on the final.
4. **Attendance** – Each class period is worth ten points, for each class period that is missed 10 points will be deducted. For each tardy three points will be deducted. The only exception will be for those involved with school activities. Points will also be deducted for those who choose not to participate in class. Points will also be deducted for those who choose not to following classroom rules and procedures.
5. **Projects** – A project and or an assignment in each area will need to be completed. I will assign various tasks in each area worth 100 points. Those projects have to be completed before the student moves on to the next area.

Grading Scale:

100-90% = A
89-80% = B
79-70% = C
69-60% = D
59 and below = F

Student Signature: _____

Parent/Guardian Signature: _____