



Mulvane High School

Mass Production I

Instructor: Mr. Dieker

Course Description:

Mass Production I - This is an introductory course for students, which covers many aspects of production technology. Students will integrate multiple mass production processes to design and build projects that will be sold to the community. Students will be required to utilize oxyfuel, ARC, and MIG welding while constructing their mass production project that is assigned to them. Students will also use a wide variety of metalworking machines, including but not limited to the lathe, mill, sheet metal breaks, and various hand tools to complete their project. Students will be required to work as a team in order to produce a quality product.

Text:

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

Course Objectives:

Mass Production 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 industry.

As a basic production class it has as its objective the following:

1. To provide an introduction to the area of metals, welding, and production processes.
2. To provide an opportunity for the development of skills, a degree of “know how” and an understanding of some of the production techniques.
3. To provide information that will aid in the selection and application of various materials used in a production setting.
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.
7. Production processes. (Cutting, grinding, welding, Quality Control, Etc.)

Activities: - To accomplish the course objectives, at least one mass production project must be completed during the course. Along with this lab work, text assignments and study questions will be completed regularly. Students will be required to market and produce a quality product as a team.

Evaluation: - Evaluations will be made from the following.

1. **Quizzes and Assignments** – Quizzes 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** – Each student will be required to complete a flow chart, explain their marketing strategy they used to sell their product, and explain how areas of their strategy could have been improved.
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 follow classroom rules and procedures.
5. **Projects** – A mass production project that is assigned and or chosen by the class will need to be completed and marketed. This product will be evaluated on the quality of the end product as well as the quality of the marketing strategy.

Grading Scale:

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

Student Signature: _____

Parent/Guardian Signature: _____