

BASIC WELDING: Int 363-1 credit

Instructor: Mr. Corbin

E-mail: dcorbin@dbqschools.org

Course description:

This course will increase the student's competency and proficiency in many aspects of welding. Students will have experience working with oxyacetylene, shielded arc, and mig welding processes. Along with the bonding of metals each student will gain experience in cutting and metal fabrication procedures.

CTTIT standards:

1. Students will develop an understanding of the characteristics and scope of technology.
2. Students will develop an understanding of the core concepts of technology.

Assessments:

1. Test, quizzes and chapter work sheets.
2. Daily class / lab journals.
3. Student organizational duties.
4. Completion of welds to industry standards.
5. Student project (optional)

Course content:

Welding objectives:

1. Oxy-acetylene welding.
 - A. Equipment set-up and maintenance.
 - B. Student demonstration and compliance of safety procedures.

- C. Completion of Oxy flat position.
- D. Completion of Oxy out-of-position.
- 2. Shielded arc welding.
 - A. Equipment set-up and maintenance.
 - B. Student demonstration and compliance of safety procedures.
 - C. Completion of 6011/6013/6010/7018 flat position.
 - D. Completion of 6011/6013/6010/7018 out-of-position.
- 3. Metal cutting.
 - A. Equipment set-up and maintenance.
 - B. Student demonstration and compliance of safety procedures.
 - C. Completion and demonstration of Oxy acetylene cutting.
 - D. Completion and demonstration of plasma cutting.
 - E. Completion and demonstration of hydraulic shearing and punching process.
- 4. GMAW Mig welding.
 - A. Equipment set-up and maintenance.
 - B. Student demonstration and compliance of safety procedures.
 - C. Completion of mig flat position.
- 5. Student project (optional)
 - A. Instructor approved project.
 - B. Complete set of working plans.
 - C. Project paper / plan of procedure.

Instructional strategies:

- 1. Student to teacher discussions.
- 2. Written assignments.
- 3. Peer instruction.
- 4. Demonstrations.

5. Lab activities.

Resources:

Textbook: Modern Welding by Althouse.

Required materials:

1. Industrial quality eye protection; State of Iowa Z-87 standard.
2. Writing materials; notebook and pencil.
3. Appropriate lab clothing, hard sole shoes. (no sneakers or sandals)
4. Leather welding gloves.
5. Standard or mig pliers.

Academic/behavioral expectations:

1. An instructor must be present before students will be allowed to work in the lab.
2. Industrial quality eye protection will be worn at all times.
3. Students who endanger themselves or others will be removed from class.
4. Food and drink are not allowed in the class/lab area. (see class expectations)
5. Hempstead's discipline policies will be followed.

Grading:

Grading will be based on the following but not limited too;

1. Test – Test will cover chapter and lab material. Safety test will need a 100 % score to pass. Students will need to pass all safety exams to be able to participate in any lab activities.
2. Quizzes – Quizzes may be announced or they may be a pop quiz. Pop quizzes cannot be made up.

3. All homework will be handed in and graded. Late material will receive half credit.
4. Semester exam – The semester exam will be an individual performance exam and will be approximately 20% of the student's final grade.-

Communication:

1. Students can contact me before or after school.
2. Parents and students with questions and concerns may use e-mail (dcorbin@dbqschools.org)
3. Power school – Grades will be updated every two weeks or as needed do to lab activities.
4. I can be reached any time during the day by calling Hempstead High School 563-552-5200.

Course content and class objectives are subject to change as needed.