Syllabus AG 221 - Agricultural Engineering & Fabrication II

Mr. Johnson - (480)497-0177 ext 3102 - Ken.Johnson@GilbertSchools.net

Course Description:

Students in this course will learn advanced skills in welding. Major topics are the use of plasma cutter, arc welding, MIG welding, TIG welding and gas cutting equipment. Other topics include metal work, project construction, agricultural structures and project plan design. FFA activities in agricultural mechanics are emphasized. An approved Supervised Agricultural Experience is required.

Competencies/Topics:

1. Demonstrate Personal and Human Relation Skills.
2. Construct and Maintain Facilities and Equipment.
3. Apply Approved Practices in Using Metalworking to Construct Facilities.
4. Design and Construct Hardscapes.
5. Operate and Maintain Agricultural Equipment.
6. Apply Approved Practices in Laying Concrete.
7. Apply Approved Practices in Land Surveying and Measurement and GPS.

Grading:

Students will earn points by written assignments, quizzes, tests, and hands on activities in the laboratory. Approximate point values are as follows:

Students will earn points by written assignments, quizzes, tests, and hands on activities in the laboratory. Approximate point values are as follows: Assignment Type	1st Semester	2nd Semester
Written assignments, quizzes, tests	300 points	600 points
Laboratory projects	1000 points	500 points
Laboratory work	1300 points	700 points
Quarterly Leadership points	200 points	200 points
Final Exam / Required Forms completed	560 points	400 points
Interactive Notebook	350 pts	350 pts
Total points possible	3710 points	2750 points

A large portion of the grade is based on laboratory activities. Employability Skills will be graded that could include proper preparation, punctuality, and participation, attitude, cooperation, willingness to share will be graded. School rules will apply to absences, tardiness, and make up work. It is the student's responsibility to make up all work missed in a timely fashion. Students cannot make-up non-work days or non-dress days.

Course Procedures

Performance objectives for this course can only be completed by student participation in planned activities. Student grades will be based upon the completion of assignments given both in class and in the laboratory. Students are expected to dress appropriately for activities planned and work conducted. Safety procedures will be emphasized at all times.

Major Projects

Some of the major projects that students will be expected to complete include keeping an Interactive Notebook, personal job related records, welding skill development, project construction, class projects (school improvement construction projects). Please refer to the curriculum outline for approximate times projects will be due.

This course may be taken for Dual Enrollment at MCC as Welding 101.