



Syllabus
AG 120 – Agricultural Engineering & Fabrication I
Mr. Bushong
 480-497-0177 ext 133
Dennis.Bushong@GilbertSchools.net



Course Description - Students in this course will learn arc welding, oxy-fuel cutting, plasma arc cutting, equipment operation, plumbing, cold metal, hot metal, and project construction skills. Students will learn to read working drawings and complete project plans. FFA activities and agricultural mechanics are emphasized. A Supervised Occupational Experience is required. The purchase of project materials 2nd semester is the responsibility of the student/parent/guardian.

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.

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

Assignment Type	1st Semester	2 nd Semester
Written assignments, quizzes, tests, article summaries, career reports	600 points	500 points
Laboratory projects	500 points	1000 points
Laboratory work	700 points	1300 points
Quarterly leadership	100 points	100 points
Final Exam / Required Forms completed	400 points	300 points
Supervised Agricultural Experience	100 Points	100 points
MCF Project		200 points
Total points possible	2400 points	3500 points

A large portion of the grade is based on laboratory activities. Proper preparation, punctuality, and participation will greatly affect the laboratory points, thus the final grade. 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 will also be required to conduct a Supervised Agricultural Experience. This is a work/research/ or entrepreneurial project in agriculture. They will keep records and be graded on completion and number of hours involved in the project each semester.

School policies for late assignments will be implemented. Incomplete assignments are not accepted.

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.

Students that choose to not work in a safe manner will be removed from the work area and given written assignments due that day. Students that are not dressed properly and/or show up late will lose daily points that cannot be made up. If a student falls behind in their skill development, work outside of class time will be necessary to get caught up and earn the appropriate grade.

A locker and lock is provided for students to store their personal work clothes.

See Also – Ag Engineering Course Requirements document

Bushong 2018-2019 Curriculum

Week No	Week of:	Events	Ag Processing	Ag Engineering & Fab I
1	8/2		Intro/Class Policies	Orientation
2	8/6		Meat Science	Intro to Agriculture
3	8/13		Lab Safety	SAE/FFA
4	8/20		Beef Harvesting	Lab Safety
5	8/27		Beef Harvesting	Intro to Welding
6	9/3	Labor Day	Meat Identification	Arc Welding
7	9/10	Livestock Sale 9/15	Beef Processing	Wire Feed Welding
8	9/17	Steak Fry 9/21	Beef Processing	Oxy-Propane Cutting
9	9/24		Beef Processing	Safety Tests
10	10/1		Beef Processing	Welding Skill Development
	10/8	Fall Break		
11	10/15		Beef Processing	Welding Skill Development
12	10/22	Nat'l FFA Conv	Beef Processing	Welding Skill Development
13	10/29		Beef Processing	Welding Skill Development
14	11/5		Beef Processing	Welding Skill Development
15	11/12	Vets Day/Dist CDE	Wild Game Process	Welding Skill Development
16	11/19	Thanksgiving	Wild Game Process	Welding Skill Development
17	11/26		Wild Game Process	Welding Skill Development
18	12/3	MWC CDE	Wild Game Process	Welding Skill Development
19	12/10		Beef Processing	Project Planning
20	12/17		Exams	Exams
	Dec 22 - Jan 4 Winter Break			
21	1/7		Carcass Evaluation	Basic Drafting
22	1/14		Carcass Evaluation	Basic Drafting
23	1/21	MLK/PMC	USDA Grading	Drawing Completion
24	1/28		Meat Judging	Project Construction
25	2/4	Dist CDE	Meat Judging	Project Construction
26	2/11		Meat Judging	Project Construction
27	2/18	Pres Day	Swine Processing	Project Construction
28	2/25	UofA	Livestock Processing	Project Construction
29	3/4		Livestock Processing	Project Construction
	3/11	Spring Break		
30	3/18		Livestock Processing	Project Construction
31	3/25		Livestock Processing	Project Construction
32	4/1		Livestock Processing	Project Construction
33	4/8	MCF	Livestock Processing	Project Construction
34	4/15	San Tan Leadership	Livestock Processing	Project Construction
35	4/22		Meat Preservation	Project Construction
36	4/29		Curing / Smoking	Project Construction
37	5/6	FFA Banquet	Curing / Smoking	Project Construction
38	5/13		Sheep Processing	Shop Week
39	5/20	Graduation	Exams	Exams