

CENTRAL HIGH SCHOOL

Basic Ag Mechanics

INSTRUCTOR

COURSE SYLLABUS

Course Description:

In this course, theory and hands-on experiences provide opportunities for students to develop basic knowledge and skills in agricultural mechanics. Instructional areas include: safety, the basic fundamentals of small engines, basic electricity, basic construction and wood working, basic metal working techniques, and operating agricultural equipment safely, technology in agriculture, surveying, and FFA. Students will be FFA members and participate in FFA activities.

Course Objectives:

Upon the successful completion of this course, students will be able to:

Understand basic concepts of electrical energy.

Understand concepts of electrical circuits.

Safely use welding equipment

Demonstrate the ability to weld mild steel.

Safely use hand and power tools.

Understand the conditions that make a safe working environment.

Write and read legal land descriptions.

Demonstrate the ability to measure land.

Operate surveying equipment.

Understand basic internal combustion engine concepts.

Identify small engine parts & tools.

Required Class Materials:

You are required to bring to class: paper, writing utensil, 3 ring binder, flash drive or access to student storage. A simple calculator is also recommended. Safe and proper attire to working in the shop.

Text:

Agricultural Mechanics Fundamentals & Applications 4th Edition

Course Outline:

1st semester

Safety in the shop

Land Measurements & Descriptions

Surveying

Hand and power tools

Lumber and fasteners

Finishing Wood

SAE record keeping

2nd semester

Electrical concepts

Electrical wiring

Welding Safety

Arc Welding

Small Engine Concepts, Tools, and Parts

SAE recordkeeping

Major Assignments:

Grading:

Skyward Name	Category	Weight
Final Exam	Assessment/Coop Participation	15%
In-Class work	Assignments/Labs/Reports/Participation/Quizzes/Tests	70%
Other-1	SAE & Recordkeeping	10%
Participation	FFA Participation	5%

Class Policies & Procedures:

1. Students will be in their seat when the bell rings, with writing utensils, their Agriculture 3 ring binder, any assignments due that day, and any other materials needed for class that day. I expect them to stay in their assigned seat unless instructed or permission to leave their assigned seat.
2. Students will conduct themselves in a manner that allows everyone the right to a good learning environment.
3. Students shall leave materials and objects in the classroom and/or lab, teacher's desk, shop greenhouse, storage compartments, etc. alone unless instructed or given permission to use them.

4. Students will participate in classroom and/or lab instruction and activities at all times. It is not an option to not participate or attempt the activities of this course.
5. Students will be dismissed from class when all materials are returned to proper storage area and teacher verbally dismisses them.
6. Students will confer with teacher if they feel all possible tasks have been completed.
7. Students' heads will be in an upright attentive position without the support of their arms and hands.
8. Students will contact me the day they return from any absence, to update student on missed classroom/lab/greenhouse activities. *(I am usually in my room before and after school and during lunches. If you cannot find me at one of these times. My email is wbretzman@cusd4.org or phone # 939-4673)* Failure to contact me will result in this manner, may result in a late grading policy or no credit for missed assignments or tests.

Miscellaneous: FFA is an integral role of agriculture education. Students are automatically enrolled in the FFA. Students are strongly encouraged to participate in these activities.

Students must work outside of the classroom hours at the department cooperative. Student hours will be worked during regular coop hours (Tuesday 3:30-5:30 pm and Saturday 8:00 -11:30 am). Meeting the minimum hours required/semester will be reflected as 50% of the semester exam.

Instructor Contact:

Email – wbretzman@cusd4.org

Phone: school 815-694-2321 ext. 2113

Home 815-939-4673