

# **CROCKETT COUNTY HIGH SCHOOL SYLLABUS**

**Agricultural Power and Equipment**

**Neil Bringle**

**Room 402/404/AG SHOP**

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**COURSE DESCRIPTION:** Agricultural Power and Equipment is an applied course in agricultural engineering with special emphasis on laboratory activities involving small engines, tractors, and agricultural equipment. The standards in this course address navigation, maintenance, repair, and overhaul of electrical motors, hydraulic systems, and fuel-powered engines as well as exploration of a wide range of careers in agricultural mechanics. Upon completion of this course, proficient students will be able to pursue advanced training in agricultural engineering and related fields at a postsecondary institution.

**SUPPLIES:** Change of clothes (Optional, but the following are prohibited in shop at certain times. Shorts, open-toed shoes, loose/baggy clothing, excessive jewelry)  
Notebook for note taking (Folder or 3-ring binder will work)  
Pencil or Pen

## **CLASSROOM EXPECTATIONS:**

1. All students will respect Mr. Bringle, peers, and any guests of the classroom.
2. **ABSOLUTELY NO CELL PHONES ALLOWED!! NO EXCEPTIONS!!**
3. You will participate in everything required of you. Laziness is NOT tolerated!
4. Remember Mr. B's 4 P's... Be positive, productive, polite, punctual.
5. No Excuses!!
6. Follow all other rules outlined in the student handbook.

## **CCHS OFFICIAL GRADING SCALE**

93-100 = A  
85-92 = B  
75-84 = C  
70-74 = D  
69-0 = F

## **GRADING CATEGORIES:**

25% - *DAILY CLASS WORK*  
50% - *TEST GRADES*  
25% - *EXAM GRADE*

## MAJOR UNITS AND PROJECTS

### 1<sup>ST</sup> QUARTER

#### Safety

Students will focus on:

- Identifying basic safety procedures
- Applying basic safety procedures
- Passing safety test with 100% accuracy

#### Careers:

Students will:

- Study what careers are available in the agriculture power and equipment field
- Study ways to diversify SAE's

#### Engine and Motor Mechanics

Students will:

- Evaluate and optimize engine performance
- Troubleshoot single cylinder engine and diagnose problems

### 2<sup>nd</sup> QUARTER

#### Heavy Machinery:

Students will:

- Recommend appropriate machinery for proper jobs
- Research basic types of fuels and lubricants, learn how to service heavy machinery
- Demonstrate the ability to maintain and repair agricultural machinery
- Discover the types and functions of precision agriculture (GIS, UAV, Etc.)

#### Navigation and Surveying:

Students will:

- Understand the basic principles of GPS, GIS, etc.
- Correctly and safely use precision agriculture

### PROJECTS: (DUE DATES WILL BE ANNOUNCED CLOSER TO DATES)

- Safety Test
- Career Project
- Small Engine ID Test
- Small Engine Measurements and Diagnosis
- Acreage Assessment
- Heavy Machinery Diagnosis
- Tractor Driving Scenario
- Tractor Repair
- Mini Tractor Project
- Welding Project

### PARENT RESOURCES:

<http://crocketthigh.ccschools.net/>

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I have read over the syllabus and I have noted that classroom behavior and student responsibility are significant factors in determining the final grade. I also have read and understand the class policies. I also understand that I can contact the teacher at [neil.bringler@crockettschools.net](mailto:neil.bringler@crockettschools.net) or call CCHS at 731-696-4525 to set-up a meeting with the teacher.

Student name: \_\_\_\_\_

Student signature: \_\_\_\_\_

Parent name: \_\_\_\_\_

Parent signature: \_\_\_\_\_