

# Williston High School

## CTE Agriculture Department

<p><b>Freshman Year</b></p> <p>1 credit Agricultural Education 1          ½ credit Horticulture</p>	<p><b>Sophomore Year</b></p> <p>1 credit Agricultural Education 1          1 credit Agricultural Education 2          ½ credit Horticulture          ½ credit Community Development/Leadership</p>
<p><b>Junior Year</b></p> <p>1 credit Agricultural Education 1          1 credit Agricultural Education 2          1 credit Ag. Technology          ½ credit Ag. Mechanics I          ½ credit Ag. Mechanics II          ½ credit Animal Science Technology          ½ credit Horticulture          ½ credit Community Development/Leadership</p>	<p><b>Senior Year</b></p> <p>1 credit Agricultural Education 1          1 credit Agricultural Education 2          1 credit Ag. Technology          ½ credit Ag. Mechanics I          ½ credit Ag. Mechanics II          ½ credit Animal Science Technology          ½ credit Horticulture          ½ credit Community Development/Leadership</p>

◆ **Agricultural Education 1**

Class Type: Elective  
 Grade Level: 9-12  
 Credit: 1  
 Pre-requisite: None  
 Extra Costs: \$20.00

Discover our State and Nation's #1 industry – Agriculture!

This course provides the students with an understanding of the agriculture/agri-business industry and it's job opportunities. Students will develop job skills in agri-mechanics (including basic woodworking, cold metal work, crops, and livestock). Practical applications of science and math are incorporated into the learning program. Leadership skills through the FFA and supervised experience programs are also developed in Agriculture Education I. Fee includes FFA dues.

◆ **Agricultural Education 2**

Class Type: Elective  
 Grade Level: 10-12  
 Credit: 1  
 Pre-requisite: Ag Ed. I  
 Extra Costs: \$20.00

A foundation of the agriculture/agribusiness provides the student with the basic agricultural knowledge, which enables them to begin developing life-long skills. Students learn practical applications for math and science. A broad program of plant, animal, and soil sciences, agri-mechanics – including welding and projects requiring the use of power tools, agribusiness, natural resources, leadership development and supervised experience programs are studied. Fee includes FFA dues.

◆ **Ag. Technology**

Class Type: Elective  
 Grade level: 11-12  
 Credit: 1  
 Pre-requisite: Ag. Ed 1 & 2 or approved by instructor  
 Extra cost: \$20.00

This course is designed to reinforce and extend students understanding of current agriculture technologies. Students will be provided hands-on activities and use of some of the newest technologies available. The course will provide students with applied activities in areas of Graphic Production (laser engraving, vinyl cutting), CNC router, Electronics/Electricity, Robotics, Hydraulics, Pneumatics, Mechanical, GPS, and GIS. Learning activities are varied with classroom, shop and field trips.

◆ **Horticulture**

Class Type: Elective  
Grade Level: 9-12  
Credit: 1/2  
Pre-requisite: None  
Extra costs: \$5.00

This course is to prepare students with skills necessary to enter horticulture occupations and advanced horticulture courses. Instruction includes growing plants, plant anatomy, fertilizers, and nutrition of houseplants, greenhouse management, floral design, landscaping, gardening, insect and disease, terrariums, and hydroponics.

◆ **Ag. Mechanics I (Electricity, GPS, Surveying, Structures)**

Class Type: Elective  
Grade Level: 11-12  
Credit: ½  
Pre-Requisite: Ag. Ed I & 2 or approved by instructor  
Extra Cost: \$20.00

This course is designed to reinforce and extend students' understanding of applied mechanics applications. The course will provide students with applied activities in electrical wiring principles, GPS (global positioning systems), surveying, and structures. Learning activities are varied with classroom, shop and field trips. Leadership development and supervised agricultural experiences are integral to these courses.

◆ **Ag. Mechanics II (Small Engines, Welding, Plumbing)**

Class Type: Elective  
Grade Level: 11-12  
Credit: ½  
Pre-requisite: Ag. Ed I & 2 or approved by instructor  
Extra Cost: \$20.00

This course is designed to reinforce and extend students' understanding of applied mechanical applications. The course will provide students with applied activities in small engine maintenance and repair, welding (arc, gas, wire feed, and plasma arc), metal lathe and plumbing. Learning activities are varied with classroom, shop, and field trips. Leadership development and supervised agricultural experiences are integral to these courses.

◆ **Animal Science Technology – Small Animal Care, Veterinary Science, Equine Science, Advanced Animal Science)**

Class Type: Elective  
Grade level: 11-12  
Credit: ½  
Pre-requisite: Ag. Ed 1 & 2 or approved by instructor  
Extra cost: \$20.00

This course integrates biological and technological concepts with principles of agriculture. This course will provide students with applied activities in small animal care, veterinary science, equine science, aquaculture, advanced animal science. Learning activities are varied with classroom, laboratory and field trips. Leadership development and supervised agricultural experiences are integral to these courses.

◆ **Community Development/Leadership**

Class Type: Elective  
Level: 10, 11, 12  
Credit: 1/2  
Extra Costs: \$20.00

This course provides students with the opportunity to understand the principles and fundamentals of the community development process, selection, planning and implementation of a community development project. The course will also provide leadership training. All students will be required to complete a program of supervised experience and apply for Proficiency awards and advance degrees. This class will be two semesters that will be one full year. The second semester class will be a continuation of semester one.