

MS. WILLIAMS  
AGRICULTURE INSTRUCTOR



### CLASSROOM SUPPLIES

Students will need:

- A backpack
- There will be a \$20 lab fee for Agriculture that is due by September.
- FFA membership is optional but recommended. Dues are \$30, and include a club shirt.

Our class is always in need of hand sanitizer, rabbit feed, and chicken feed if you wish to make a donation.



Contact Info  
Please message me through Schoology as your first line of contact.

School Number  
863.232.4665



\*\*\*\*Check your child's Schoology for upcoming assignments, late or missing assignments and their most current grades\*\*\*\*

GRADING

Unit Tests/Projects/Labs=Products 80%  
repwork/Exit-Tickets/CK-12 Articles=Practice 20%  
A 90-100 B 80-89 C 70-79 D 60-69  
Please allow 72 hours from the due date for assignments to be graded.

All work is posted for the week on Sunday night.  
Office hours: Daily 3:00 pm-3:50 pm

### CLASSROOM EXPECTATIONS

- Always be prepared.
- Follow all safety rules.
- Respect each other and class materials.
- Work with 110% effort and a positive attitude.
- Exhibit the Bok Way at all times.

### POSSIBLE CONSEQUENCES

- Warning and redirection
- Phone Call and student conference
- Referral/Suspension/Parent/Teacher Conference

# Agriscience Foundations 1 (8106810)

## Orientation to Agriscience and Career Planning (8100110)

### Fundamentals of Agriculture, Food, and Natural Resources Services (8021400)

Scholars will develop competencies in the areas of agricultural history and the global impact of agriculture; career opportunities; scientific and research concepts; biological and physical science principles; environmental principles; agriscience safety; principles of leadership; and agribusiness, employability, and human relations skills in agriscience. Laboratory-based activities are an integral part of this course. Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental quality, and safety procedures will be an integral part of this course.

#### Week 1: Classroom Environment and Culture Building:

History of Bok, Bok Way, 12 Power Words, [Vocabulary of Knowledge and Design](#), [55 Essentials](#)  
**Land Lab Safety**

All scholars must read through land lab safety rules and obtain a signed permission slip.

### Unit 1: Speak Up and Solve!

#### Inquiry: How can joining the FFA impact your life?

Collaborative Communication is used to form a common perspective which may be used to promote development in connecting agricultural practices in geographic regions.

#### **10.0 Manage leadership and communication skills**

- 10.01 Discuss the establishment and history of the FFA organization
- 10.02 Compare the characteristics and responsibilities of organizational leaders.
- 10.03 Demonstrate parliamentary procedure skills during a meeting.
- 10.04 Participate on a committee which has an assigned task and report to the class.
- 10.05 Demonstrate effective communication skills through delivery of a speech or conducting a demonstration.
- 10.06 Use a computer to assist in completion of an agricultural project.

#### **13.0 Identify components of network systems**

- 13.01 Identify structure to access internet, including hardware and software components
- 13.02 Identify and configure user customization features in web browsers, including preferences, caching, and cookies.
- 13.03 Recognize essential database concepts.
- 13.04 Define and use additional networking and internet services.

#### **14.0 Describe and use communication features of information technology**

- 14.01 Define important internet communications protocols and their roles in delivering basic Internet services
- 14.02 Identify basic principles of the Domain Name System (DNS).
- 14.03 Identify security issues related to Internet clients.

### Unit 2: On the Dirt

#### Inquiry: How can you choose the right livestock to raise on your farm?

Globalization affects the functions and sustainability of the live animal market place and communities in the marketplace.

#### **02.0 Differentiate between animal welfare and ethical treatment of animals**

- 02.01 Describe the proper handling of production animals.
- 02.02 Compare animal welfare and animal rights
- 02.03 Explain how animal welfare and animal rights advocate groups impact production agriculture.
- 02.04 Summarize animal cruelty and the consequences of cruel treatment of animals.

#### **03.0 Explain skills and principles used in dairy production**

- 03.01 Explain the difference between breeds of dairy cattle
- 03.02 Demonstrate knowledge of proper health and nutrition for dairy animals.
- 03.03 Explain the safety procedures used for dairy products.
- 03.04 Compare different styles of dairies and milking parlors.
- 03.05 Identify the varieties of dairy products and the methods of processing.
- 03.06 Create a dairy product

#### **04.0 Explain skills and principles used in livestock production**

- 04.01 Compare the different breeds of livestock.
- 04.02 Differentiate the different cuts and grading of meat.
- 04.03 Evaluate proper health and nutrition for livestock animals.
- 04.04 Demonstrate knowledge of terminology for animals based on species and condition (eg. age, sex, bred, etc...)
- 04.05 Determine different reproduction methods, and the process of selective breeding.
- 04.06 Explain how the use of biotechnology has impacted the livestock industry.

#### **05.0 Explain the skills and principles used in poultry production**

- 05.01 Compare different types of poultry and their uses in production agriculture.
- 05.02 Differentiate proper techniques for classification and grading of poultry and poultry products.
- 05.03 Describe proper safe handling techniques for poultry products.
- 05.04 Evaluate knowledge of health and nutrition for poultry.
- 05.05 Explain how the use of biotechnology has impacted the poultry industry worldwide.

#### **09.0 Apply scientific and technical skills in production agriculture**

- 09.01 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings.
- 09.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and Internet applications

### Unit 3: In the Dirt

#### Inquiry: What is the importance of plants grown in agriculture?

The design system leads to the adaptation and evaluation of horticulture development and helps cultures sustain life.

##### 07.0 Explain skills and principles used in vegetable production

- 07.01 Produce a vegetable crop.
- 07.02 Compare the components of soil.
- 07.03 Perform a soil test
- 07.04 Describe how climate can affect crop production
- 07.05 Compile knowledge of growing seasons for geographic regions
- 07.06 Explain the use of Best Management Practices in crop production.
- 07.07 Investigate the impact of pests on crop yields.
- 07.08 Model the safety precautions on a pesticide and fertilizer label.
- 07.09 Assess proper irrigation methods for crops.
- 07.10 Analyze knowledge of harvesting techniques and equipment
- 07.11 Compare types of storage facilities.
- 07.12 Explain how the use of biotechnology has impacted vegetable crop production.

##### 08.0 Explain skills and principles used in nursery production

- 08.01 Perform plant propagation.
- 08.02 Develop a growing schedule for nursery plants
- 08.03 Model methods for integrated pest management
- 08.04 Compare types of growing media
- 08.05 Identify nutrients necessary for plant growth from the periodic table and their functions
- 08.06 Identify plants based on common and scientific names
- 08.07 Describe principles for plant growth
- 08.08 Explain different methods of irrigation
- 08.09 explain how the use of biotechnology has impacted plant production worldwide

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### Unit 4: In the Field

#### Inquiry: What agriculture careers are available?

Globalization has affected the functions and sustainability of agriculture in the marketplace.

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##### 11.0 Demonstrate good work habits, and career planning in agriculture production

- 11.01 Identify attitudes and habits necessary to achieve career success.
- 11.02 Describe personality aspects to consider when choosing a career.
- 11.03 Identify the basic steps in career planning.
- 11.04 Identify and research careers within a specific area of agriscience.

##### 12.0 Integrate the use of science, mathematics, reading, geography, history, writing, and communication in production agriculture

- 12.01 Apply basic mathematics operations to solve agricultural problems.
- 12.02 Correctly use measuring devices and utilize measurements to solve agricultural problems.
- 12.03 Prepare written and/or oral materials using correct English grammar.
- 12.04 Identify the main idea in oral presentations and/or written materials.
- 12.05 Locates, organizes, and interprets information from a variety of agricultural sources.
- 12.06 Describe the historical evolution of agriculture.
- 12.07 Select and study a problem that can be tested under controlled conditions to establish a hypothesis or to illustrate a known law.