

Agriscience Syllabus
McMinn Central High School
2017-20178

Instructor

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Mission Statement

By the end of this course, students will be able to view agriculture and agriculturally related fields as a necessity and have the knowledge and skill set to begin pursuing an agriculturally created career by researching current and past agricultural practices, having a basic understanding of biology and chemistry, and gaining some hands-on skills that cannot be learned in a regular classroom.

Course Description

Agriscience is an introductory laboratory science course that prepares students for biology, subsequent science and agriculture courses, and postsecondary study. This course helps students understand the important role that agricultural science and technology serves in the 21st century. In addition, it serves as the first course for all programs of study in the Agriculture, Food and Natural Resources Cluster. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects, Tennessee Common Core State Standards in Mathematics, and Tennessee state standards in Anatomy and Physiology, Biology I, Biology II, Chemistry I, Chemistry II, Environmental Science, Physical Science, Physics, and Physical World Concepts, as well as the National Agriculture, Food and Natural Resources Career Cluster Content Standards. This course counts as a lab science credit toward graduation and college entrance requirements.

Course Objectives

1st 9 weeks:

Understand how to safely work in an agriculture environment by performing 100% on a safety test.

Recognize and understand the historical and modern importance of agriculture and the FFA organization by researching agriculturally based organizations.

Learn how soil impacts agriculture and other industries by conducting and evaluation.

2nd 9 weeks:

Introduce concepts of environmental systems and how we impact them by researching current environmental issues.

Have an understanding of how we generate and use power by looking into our power industry and where we get our local power.

3rd 9 weeks:

Learn about the importance and relevance of the FFA creed by reciting it in-class.

Learn about cell biology and the differences between plant and animal cells by researching cell parts and drawing the two cells separately.

Begin to understand genetics and how it influences our health and appearance by researching genetics and solving Punnett squares.

4th 9 weeks:

Go over ruminant stomachs and how they differ from ours by learning the parts, their function, and by drawing the stomachs.

Have a basic understanding of all the body's systems and demonstrate proficiency by dissecting a mink.

Rules:

1. Come to class prepared. Bring class binder, writing utensils, homework, and so forth
2. All policies that are in the Central Handbook apply to this class including attire and communication devices regulations.
3. Students must be in the classroom when the bell rings or they will receive a tardy.
4. Students must be silent when the PA system is on or when visitors are in the room.
6. No student may leave classroom without permission.
7. Students shall **respect** Mr. Felker, Mrs. Bryant, teachers, substitutes, administration officials, and each other.
8. **No Tobacco or Profanity.**
9. Each student **WILL** keep classroom, greenhouse, livestock laboratory, small animal laboratory, and pastures clean and straight at all times. This also includes busses, vans, hotel rooms and field trip grounds that we will visit.

10. **Extreme Care** is expected of each student when handling animals in the classroom or at the barn.
11. No whining. We go outside; you will get your hands dirty at some point, and you will survive.

Any disregard for these policies will result in:

- 1st Offense-Write-offs
- 2nd Offense- Loss of privileges (barn, shop, etc.)
- 3rd Offense- Office Referrals

Materials needed for class

1. Students should come to class prepared with a pen and class notebooks at all times.
2. We will be outside and students should have mud boots and a rain jacket that may be kept in class lockers.

Exposure to small animals, livestock, and weather:

Upon your child entering my classroom, they are exposed to various animals on a daily basis. The most common ones being dogs, cats, rabbits, pigs, snakes, fish, birds, goats, and more. I want you to understand, as their guardian, that they will be required to pass a safety test with 100% to handle these animals. If they do not make a 100% on the safety test I will inform them that they are not to participate in any hands-on activities until they do achieve a 100%. Your child is not allowed to handle animals without the teacher's permission at any time. Remember, this is an agriculture class. We will be doing many activities outside in various weather conditions. It is strongly suggested that each student brings a pair of mud boots and a jacket to be kept in my class lockers.

What is Agricultural Science Education?

The agricultural education program is built on the three core areas of classroom/laboratory instruction, supervised agricultural experience programs and FFA student organization activities/opportunities. The program is designed for delivery through these three components as follows:

Classroom/Laboratory Instruction – quality instruction in and about agriculture that utilizes a “learning by doing” philosophy. On campus we have a seven-acre farm, barn, greenhouse, small animal lab, and agriculture mechanics shop all available to aid in agriculture education.

Supervised Agricultural Experience Programs – all students are expected to have an agriculturally related work-based learning experience while enrolled in agricultural education courses. These experiences need to be tied in to the curriculum, conducted by the student, and have career building potential.

Types of SAE's- There are a variety of SAE's available to students including:

1. Exploratory- this is the basic beginner SAE. It is used to educate students in agriculture and become aware of possible careers. Examples are observing a welder, growing plants in different containers to see which one is best, or participating in an Agriscience fair.
2. Entrepreneurship- for this SAE a student would implement, operate, and assume financial risks in an agriculturally based practice. The long-term goal of this SAE is for a student to own or manage a business. Examples of this SAE are running a fish farm, raising livestock, or operating a greenhouse.
3. Placement- these SAE's involve the placing of a student in agriculturally related environments (farms, veterinary clinic, commercial greenhouses) to get a “learning by doing” experience. Students keep track of hours worked, work type, and wages.
4. Research- these can be experimental or analytical. For the experimental, a student will formulate a hypothesis for an agriculturally related question. Then follow the scientific method to support or reject their theory. For the analytical, the student will gather information about a topic that cannot be experimented upon. Then the data will be analyzed and produce some type of finished product.

SAE assignments will be graded on an individual basis, as each SAE will be unique to each student. At the end of each nine weeks a progress report must be given to Mr. Felker to show the development of the SAE for a total of four grades. Examples of things to include in the reports are: a summarization of what the SAE is, photos of the student working on the SAE, a timeline of the expected progress, and any other information pertinent to the project. Upon completion of the SAE, each student will present to the class a report of the project and what they learned while doing the SAE.

FFA Student Organization activities/opportunities – FFA activities are an integral part of the agricultural education program that all agricultural education students should participate in if they are to fully benefit from their enrollment in the program. We have many academic (called career development events) and extracurricular

activities (like rafting!!!) that promote camaraderie, leadership, and scholarly growth. There is a \$12 fee to join FFA that goes to the National FFA Organization. When you join and wear the blue and gold you are held to a higher standard. We expect you to maintain good grades and have good behavior at all times.

If you are in the FFA, I expect you to be active. I require you to participate in at least two CDE's annually, I expect you to attend meetings, and I expect you to treat your peers and teachers with respect. I would also like for each student to get a FFA state degree. This requires you to be in an agriculture class for three years, complete a SAE, and be an FFA officer. This can be easily done during your enrollment if you put forth the effort. Nonmembers do not attend meetings and do not attend CDE's, but I still expect good behavior out of you in my class and participation in FFA related activities during class.

Grading Scale

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

Per school board policy, you will have as many days as you have missed to make up assignments (i.e., you miss one day you have one day to make up assignment, miss two days have two days, etc.).

Late Work

Work turned in late will be deducted 10% per day late. After the third day it is a zero.

Grade Weighting

SAE= 10%

Assignments=40%

Tests=30%

Semester Exams = 20% of Entire Grade

Mr. Felker-AgScience Parents and Students

After reading through your child's course syllabus ONLINE please read and sign the following statements and return this page to Mr. Felker tomorrow. Failure to do so could limit your child's opportunities in my classes.

I _____ (guardian) understand that my child _____ will have daily exposure to various small animal pets, either class pets or those of other students. I understand that pets at times can be unpredictable which could lead to an injury on my child. I understand that most injuries occur if an animal is provoked and mishandled. I understand that my child will be required to pass Mr. Felker's safety test with 100% in order to allow my child hands-on experiences with small animals and livestock. I also agree with the grading and disciplinary sections of the syllabus. If I have any questions or concerns, I know that I can contact Mr. Felker during school hours at 423.263.5541.

I have **read and understand** the grading policy, the class rules, and consequences that have been outlined in the syllabus.

Student Signature/Date _____

Parent Signature/Date _____