SAE/ Agriscience Fair Project

***What is an SAE and Agriscience Fair?***

A supervised agriculture experience is an integral part of the agriculture program. This is a hands-on experience that students complete outside of class time. The SAE is a required component of a total agricultural education program and intended for every student. Through their involvement in the SAE program, students are able to consider multiple careers and occupations, learn expected workplace behavior, develop specific skills within an industry, and are given opportunities to apply academic and occupational skills in the workplace or a simulated workplace environment. Through these strategies, students learn how to apply what they are learning in the classroom as they prepare to transition into the world of college and career opportunities

The National FFA Agriscience Fair recognizes student researchers studying the application of agricultural scientific principles and emerging technologies in agricultural enterprises. This research can be conducted in any of the following areas: Animal Systems, Environmental Services/Natural Resource Systems, Food Products and Processing Systems, Plant Systems, Power, Structural and Technical Systems, and Social Science.

***What can I do for my SAE and Agriscience Fair Project?***

The possibilities for your SAE and Agriscience Fair are endless and it is completely up to you. There are 4 categories of SAEs and 6 categories of Agriscience Fair. It needs to be related to the agriculture industry in some way.

**Ownership/Entrepreneurship**- Students with an ownership/entrepreneurship type SAE own the enterprise, equipment and supplies, make the management decisions and assume the financial risks to produce a product or provide a service.

Examples of this SAE include:

* + Growing & selling vegetables
  + Cattle operation
  + Growing bedding plants
  + Building construction projects
  + Lawn Care business
  + Chopping and Selling fire wood
  + Small Engine Repair

**Placement/Internship**- Placement/Internship programs involve the placement of students in agriculture, food or natural resources-related businesses to provide a "learning by doing" environment. These experiences may be paid or un-paid.

Examples of this SAE include:

* + Working on a farm
  + Working in someone’s garden
  + Landscaping a yard
  + Working in an agriculture business
  + Volunteering at an animal shelter

**Research- In a research SAE students plan and conduct major agricultural experiments using the scientific process and discover new knowledge. As part of the research, students verify and demonstrate or learn about scientific principles in agriculture.**

**Examples of this SAE include:**

**Conducting an experiment**

* **The effects of fertilizer on plants**
* **How different nutrients effect growth of plants or animals**

**Exploratory-** Exploratory SAEs are appropriate for all agriculture students. This SAE activity is usually beginner level, short term and designed primarily to help students become literate in agriculture and/or become aware of possible careers in the AFNR career cluster. Exploratory SAEs should help students create a larger more focused SAE.

Examples of this SAE include:

* + Researching an Agricultural Career
  + Researching an Agricultural Topic (ex. GMOs, Animal Rights, ect.)

**School Based Learning-** This type of SAE is student managed, can be entrepreneurial or placement and takes place in a school setting outside of regularly scheduled class time. The project needs to provide goods and services that meet the needs of an identified market and should replicate the workplace environment as closely as possible.

Examples of this SAE include:

Working in the greenhouse, garden, or shop after school hours.

**Improvements**- This type of SAE is when the student improves equipment, areas, or anything that is used in the ag industry.

Examples of the SAE include:

Weeding a garden

Clearing off land

Restoring a tractor, lawn mower, etc.

***What are the requirements of my SAE and Agriscience Fair?***

A total of 12.5 hours will be required of the student working on their project by the end of the semester for SAEs. There will also be reports on the progress of your SAE throughout the semester. You will also need a mijimum of 12.5 hours of research and experiment for your Agriscience Fair project.

***SAE Deadlines:***

*Initial Report- Due September 18, 2019 @ 8:00 am- 100 points*

-This will be completed on the AET network under the PLAN section of your created SAE (The pencil, under edit). One paragraphs of explanation are required for the description, and an additional paragraph is required for each of the tabbed sections that are not blacked out for your SAE. This also requires 100% of your demographic profile being completed. Additional instructional handouts will be provided for this assignment.

*SAE Report #1- Due October 9,2019 @ 8:00 am- 100 points*

-Complete 4 total hours of work on project

-Complete journal entries on AET to reflect and describe work done in those 4 hours -2 additional pictures **of the student working** uploaded to the AET website.

*SAE Report #2- Due November 6, 2019 @ 8:00 am- 100 points*

-Complete 8 total hours of work on project

-Complete journal entries on AET to reflect and describe work done in the last 8 hours.

-2 additional pictures **of the student working** uploaded to the AET website. (4 total)

*SAE Report #3- Due December 11, 2019 @ 8:00 am- 100 points*

-Complete 12.5 total hours of work on project

-Complete journal entries on AET to reflect and describe work done in the 12.5 hours -2 Pictures **of the student working** uploaded to the AET website. (6 Total)

*SAE Final Report- TBD December 2019- 100 points*

-Complete a 5 minute presentation of your project to present to the class. This should include pictures and information in whatever format you choose (powerpoint, prezi, poster, ect.)

\*\*The 12.5 hours can be a combination of several different things or just one. As long as the hours are obtained, you are putting your knowledge into action, and you are recording your work in AET.

***Agriscience Fair Deadlines:***

Initial Report- Due September 18, 2019 @ 8:00 am- 100 points

-This will be a form filled out by you and possibly a partner describing your research project. This form will be submitted by email or on AET.

Agriscience Fair Report #1: Due October 2, 2019 @8:00 am- 100 points

4 Hours should be logged along with 3 pictures.

Agriscience Fair Report #2- Due October 16, 2019 @8:00 am- 100 points

8 hours should be logged along with 6 pictures.

Agriscience Fair Report #3- Due November 6, 2019- 100 points

12.5 hours should be logged along with 9 pictures

Agriscience Fair Application- Due November 13, 2019- 200 points

Agriscience Fair Exhibit- Due November 18, 2019- 200 points

\*\* These deadlines will be strictly followed and late work will not be accepted. Your work must be submitted to the AET website by the designated time and date. Do not wait until the last minute to try to submit your work. If you have any questions please let me know!!!

\*\* Additional resources will be provided detailing how to effectively use the AET online record keeping system.

**SAE and Agriscience Fair Grading Rubric and Tips**

As previously stated, this project will account for 30% of your grade and all deadlines will be strictly adhered to. If you are absent, the work is still due since it should be turned in online. Here are a few helpful tips and reminders:

Student Profile:

This includes adding your demographics, address, and contact information to your AET profile. Once it says you have reached 100%, you are good.

Initial Reports:

This is a report of each SAE project you plan to complete and gives me a summary of your plan. A worksheet will be provided that walks you through how to enter this information step by step. It is important you complete this in paragraph form using complete sentences. The Summary tab will need to have 1 paragraphs (5 sentence minimum) and give me a good detailed outline of your project. Each additional tab should have at least 1 paragraph as well.

The Agriscience Fair project will also require this to be done as well as an additional form.

Pictures:

You will be required to have at least 6 total photos documenting your SAE project by the end of the semester and 9 pictures for your Agriscience Fair. If there are no pictures present, you will receive a 0 for the entire SAE grade for that check point. These can easily be added from the portfolio section of AET. You should be in all of your photos and there should not be more than 1 pictures of you doing the same task. For example, if you were doing yard work as a project you may have the following types of pictures:

* 1 Different picture of you picking up sticks, leaves, ect.
* 1 Different pictures of you mowing the lawn with a push mower.
* 1 Different pictures of you mowing the lawn with a riding mower.
* 1 Different pictures of you weed eating.
* 1 Different Pictures of you edging the driveway/ sidewalk.
* 1 Different pictures of you using a leaf blower.

Each picture should be different and really show the diversity of work you are completing with your project.

For your Agriscience Fair, you will need 9 total pictures that show the progress of your project. Try to be in as many of these as possible.

Hours logged:

You will also be required to document how much time you are spending on your project. You are required to complete at least 25 hours total by the end of the semester(12.5 SAE and 12.5 AgFair). A handout will be provided to walk you through these steps, but your journal entry should be very detailed and updated weekly. The following would be a good example for a lawn care project:

“On Saturday, March 23, I worked on one of my customer’s yards. I began by picking up sticks and other trash that would not need to be ran over with the mower. Next, I used the riding mower to cut the majority of the yard. Next, I went back around the edges with a push mower and weed eater. After this, I edged the driveway and curb. Finally, I used a leaf blower to blow off the excess grass clippings. This yard took 2.5 hours and I was paid $40 for my work.”

Final Presentation:

Each student will be given an option of preparing and presenting a 5 minute presentation or may choose to complete an FFA Proficiency Award if their given project fits into any of the award categories for the SAE portion of this project. This is highly encouraged as it could result in placing at the State and National levels and could also result in a cash prize. If the presentation is selected, students will need visual aids to accompany their presentation (this does not include using AET to show their pictures).

Agriscience Fair will culminate in a state application as well as a display in our Agriscience Fair exhibit.

Other tips and requirements:

* If you select an exploratory project and wish to research a career or topic, you will need to follow these guidelines:
  + If you job shadow as a part of your research, you should obtain pictures during this process.
  + If you choose to only do research on the computer, you will need to upload pictures from your research and make sure your journal entries match these pictures. You will also be required to type a 5 page research paper citing your references from your project as well as completing the presentation.
* Always, Always, Always go to your portfolio to make sure your pictures uploaded properly. There will be no excuses the day it is due if they are not there. I am always available to assist at any time up until the due date if you are experiencing any issues. We will also be spending time in class working in the program so there is no reason for this not to be completed. Always use your time wisely and do not wait until the night before it is due to enter information.