

SUPERVISED AGRICULTURAL EXPERIENCES

Introduction and Outline

WHAT IS A SUPERVISED AGRICULTURAL EXPERIENCE?

- Also Known as an SAE
- Student facilitated project (completed outside of class)
- Year Long Project
 - Check points along the way
- Placement, Entrepreneurship, and Research
- Project portfolio will be completed on AET
- Final Project will be displayed on a project board for interviews

CATEGORIES

- Animal Systems
- Environmental/Natural Resource Systems
- Food Systems
- Plant Systems
- Power, Structure, and Technology Systems
- Social Systems

HOW DO YOU CHOOSE AN SAE PROJECT?

<u>Placement</u>

Paid or Unpaid Placement

Means you are conducting work at a PLACE of business (owned by someone else)

Examples:

Working with a dog trainer or breeder

Working at a dog shelter

Working on a ranch or farm

*Placement projects cannot be completed at home

HOW DO YOU CHOOSE AN SAE PROJECT?

Entrepreneurship

Means you are the owner/operator of a business or the work you are conducting

Examples:

Lawn Care Service (Mowing Lawns)

Dog Walking Business

Making and Selling a Product

Raising Livestock Animals

^{*}Providing a Product or Service for Money

HOW DO YOU CHOOSE AN SAE PROJECT?

Research

Means you are conducting an experiment/collecting data

Examples:

Surveying people to see if they can taste the difference between grass-fed and grain-fed beef

Testing fast food items to see which restaurant has the best fries

Influencing the growth rate of vegetable plants using homemade fertilizers

Testing additives to make a fire-resistant paint

Finding the best method of irrigation for maximum surface area dispersion

*Can be completed individually or as a team (2 people maximum)

DEADLINES

Placement/Entrepreneurship

Topic Approval

Due by 09/08/23 2:30 p.m.

Project Plan (All Parts)

Due by 10/06/23 2:30 p.m.

Expenses and Income Check

Due by 11/03/23 2:30 p.m.

Reflection (All Parts)

Due by 01/19/23 2:30 p.m.

Project Board and Written Report

Due by 02/09/24 2:30 p.m.

Research

Topic Approval

Due by 09/08/23 2:30 p.m.

Title, Hypothesis, and Purpose

Due by 10/06/23 2:30 p.m.

Materials, Variables, and Procedures

Due By 11/03/23 2:30 p.m.

Conclusion

Due by 01/19/23 2:30 p.m.

Project Board and Written Report

Due by 02/09/24 2:30 p.m.

SAE/AGRISCIENCE FAIR INTERVIEWS 02/23/2024
DEADLINES SUBJECT TO CHANGE

ALL DEADLINES ARE FINAL-LATE SUBMISSIONS WILL NOT BE ACCEPTED

Placement/Entrepreneurship

PROJECT BOARD LAYOUTS

Topic Approval
Project Plan (All Parts)
Expenses and Income Check
Reflection (All Parts)
Project Board and Written Report

	<u>Project Name</u>			
Time Investment	Description	Inventory & Expenses		
Financial Investment		Profit/Loss Report		
	Pictures and Captions			
Skills		Reflection		

Research

Topic Approval

Title, Hypothesis, and Purpose

Materials, Variables, and Procedures

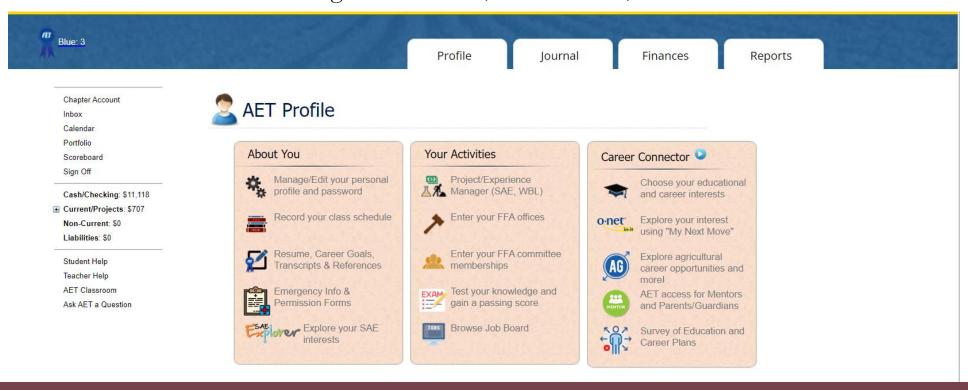
Conclusion

Project Board and Written Report

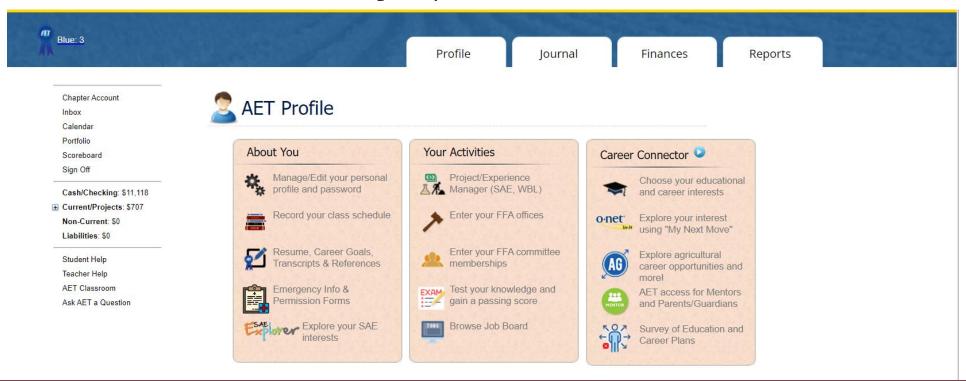
PROJECT BOARD LAYOUTS

}	Abstract	Project Title/Question Materials & Procedures	Purpose
	Hypothesis	Data/Graphs/Charts	Conclusion
	Variables	Results Pictures and Captions	Application

Login to AET (theaet.com)

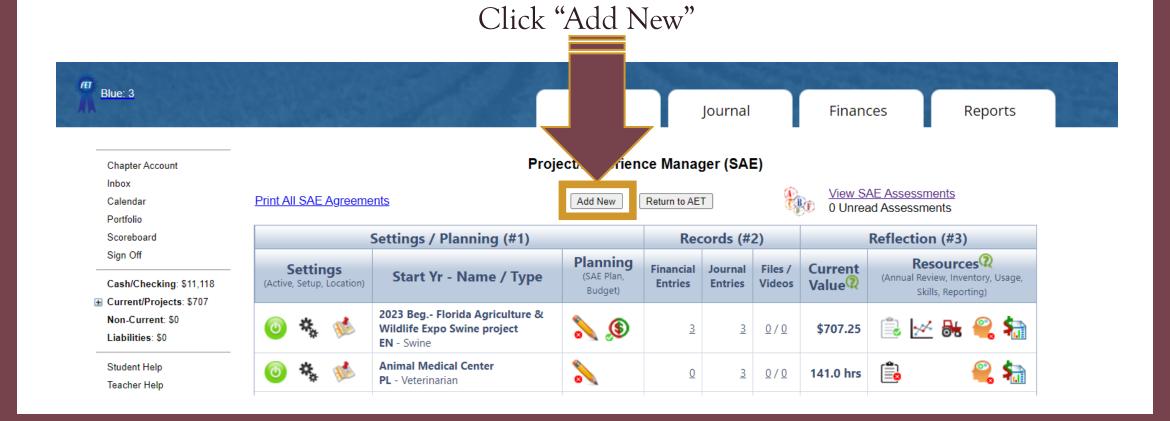


Open your Profile



Click on Project Experience Manager (SAE)

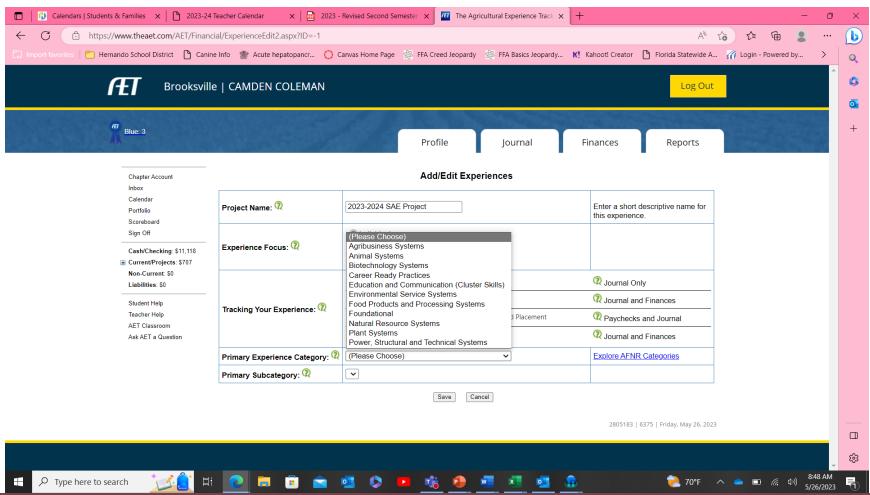


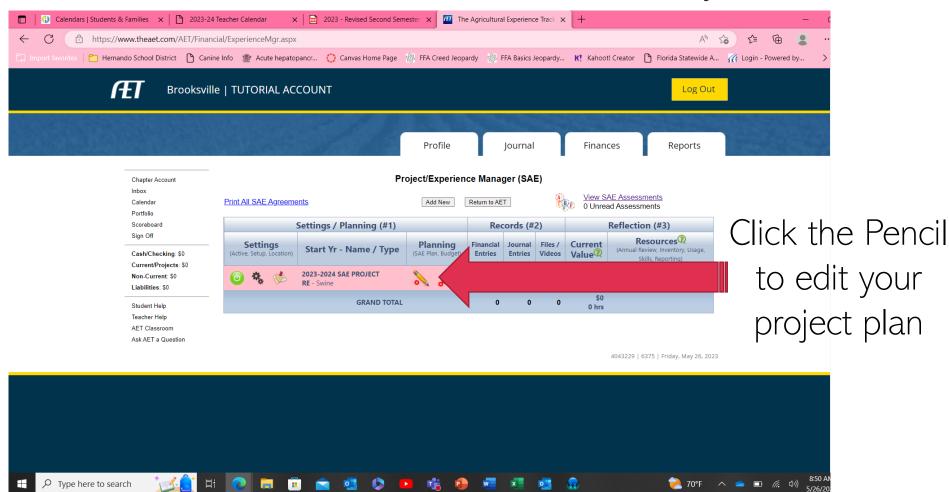


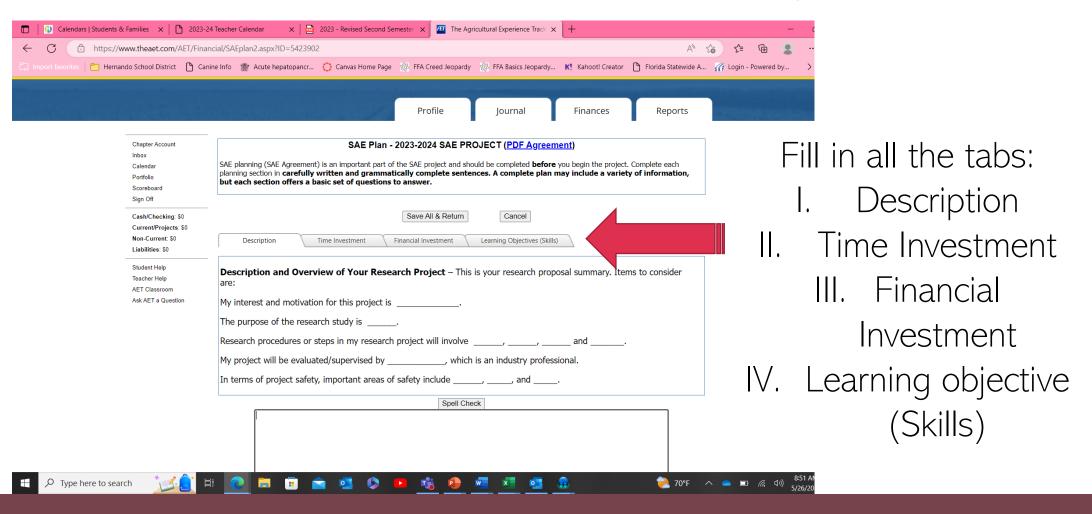
Blue: 3 Profile Journal **Finances** Reports Add/Edit Experiences Chapter Account Inbox Calendar Project Name: 🔃 2023-2024 SAE Project Enter a short descriptive name for Portfolio this experience. Scoreboard Individual Leave as "Individual" Sign Off Experience Focus: (2) O School Based Select whichever type of project you think Cash/Checking: \$11,118 Service Learning **⊞** Current/Projects: \$707 you are doing (You can always change this) Non-Current: \$0 Q Journal Only Foundational Basic: Liabilities: \$0 Research/Experimental Q Journal and Finances Agriscience: Student Help Tracking Your Experience: (2) Teacher Help Paid Placement Unpaid Placement Paychecks and Journal Job: AET Classroom Entrepreneurship/Ownership Q Journal and Finances Business: Ask AET a Question Primary Experience Category: (Please Choose) **Explore AFNR Categories** \checkmark Primary Subcategory: ~

Cancel

Save







FINAL SAE PROJECT PORTFOLIO



Click the report icon to download and print your SAE Project Portfolio

FINAL SAE PROJECT PORTFOLIO



FL - Brooksville

NATHANAEL MONROE 603313942
The Affects of Ground Glass in Concrete

Generated:

SAE Information - The Affects of Ground Glass in Concrete

Name:	The Affects of Ground Glass in Concrete
SAE Type:	Research/Experimentation
AFNR Pathway:	Power, Structural and Technical Systems
SAE Subcategory:	Fabrication
Date Range:	8/27/2018 - 11/1/2021

Scope - The Affects of Ground Glass in Concrete

2018	Agriscience Fair Project- The Affects of Ground Glass in Concrete.		
2019	Agriscience Fair Project- The Affects of Ground Glass in Concrete.		
2020	Agriscience Fair Project- The Affects of Ground Glass in Concrete.		
2021	Agriscience Fair Project- The Affects of Ground Glass in Concrete.		

SAE Plan - The Affects of Ground Glass in Concrete

Descriptio

The general outline of this project is to test ground glass as an aggregate in concrete. The purpose of this research study was to find an economically feasible way to recycle glass. The basic procedures of my project was pretty simple I was first to find a testing facility to test my samples, second was to make the samples, third was to test the samples, and fourth and finally I had to finalize the project to be ready for the competition. Safety was very important throughout the process of this project, especially during the making and testing of the project. It was important that during these times I was wearing steel tood boots, gloves, and safety glasses. Another safety feature that was utilized was a dust collector, this allowed us to be free from breathing in small particles.

Time Investment

I spent approximately 137 hours in total throughout the process of completing this project. About three hours was spent to create the project and another three hours to test the project. The steps in my research included researching effective ways to recycle concrete, the basics of concrete, and previous works of using recycled materials in concrete. A key date in my project was December 11, 2018 when I tested this project at Cemex Riverview, Florida. I plan to have a career in the agriculture industry and this project taught me the importance of structures, how they are made, and how closely the betterment of our environment can affect agriculture.

Financial Investmen

Funding for my research project was provided by my parents, Thomas and Stacey Monroe, as well as, Cemex USA. The total cost of this project was \$209. My expenses included the ground glass as well as the materials needed specifically for the concrete including, cement, silica sand, water, rock, and Admixtures.

Learning Objectives (SAE Skills)

Skill Area	Planned Activities	Results or Outcome
ABS.04.03 Identify and apply strategies to manage or mitigate risk.	Using large machinery such as the mixer and the Compression machine had high risks associated with them. I had to take every safety presculon to ensure my safety as well as those helping me. We also used the dust collector to collect all small particles from the air and prevent those working from breathing them in.	I was able to speak with Cemex Riverview staff to identify potential dangers within the manufacturing process. This allowed me to follow proper procedures such as wearing PPE and using machinery correctly to maintain my safety as well as the safety of others.

Journal - Experience-related Activity - The Affects of Ground Glass in Concrete				
11/1/2021	PST.01.01 Time spent testing, producing, concluding, presenting, etc.	246.00		
11/3/2019	PST.01.01 This past week was one to remember. Going to the 92nd National FFA Convention and Expo. I was given the opportunity to compete in the National Agriscience Fair. After competing on Wednesday we attended the lunch in to find out the top 3. In doubt I was sure my name would not be called, but to my surprise it was. The next day during the 4th general session they announced the final placings, where I placed 3rd in the Nation! This was an awesome experience and I hope to experience it again next year.	3.00		
10/13/2019	PST.01.01 Today I was able to get my board printed for nationals. It is so exciting to know that I have made it to Nationals and am able to compete. I have also began practicing so that I am ready for my interview.	1.00		
10/13/2019	PST.01.01 Today I was able to get my board printed for nationals. It is so exciting to know that I have made it to Nationals and am able to compete. I have also began practicing so that I am ready for my interview.	1.00		
5/26/2019	Apply physical science principles and engineering Printed board for agriscience fair. I was hoping for a good turnout, unfortunately it was not. It turned out blurry so I have to re print it as soon as the weekend is over.	2.00		
4/29/2019	Apply appropriate academic and technical skills. Completed application and sent to state office.	1.00		
4/7/2019	Apply physical science principles and engineering Rechecked spelling and grammar. Made any corrections needed to better project.	1.00		
3/29/2019	Communicate clearly, effectively and with reason. I was able to compete in my schools annual Agriscience Fair. I competed in the Power, Structural, and Technical category, division three. I found out Saturday that I had made it on to the state competition for a chance to make it on to the national competition.	1.00		
3/27/2019	Apply physical science principles and engineering I put the finishing touches into my project to insure that it was that I would have the best outcome possible. I fixed some minor things as well as made some changes that would make the project as a whole look nicer and have better wording.	4.00		
3/24/2019	Apply physical science principles and engineering Completed agriscience fair project. Written report was almost done so that was easy. But I had to print and paste the info for the board. Log book was pretty easy but not so quick to write.	4.00		
3/10/2019	Apply physical science principles and engineering Total for week. Spent working on all components for agriscience fair project. Including Written Report, Log Book, and the Board.	9.00		
2/28/2019	Apply physical science principles and engineering For the past couple of weeks I have been working to finish my agriscience fair project. I have been working on the Written Report as well as the layout for my board	1.00		
2/19/2019	Demonstrate stewardship of natural resources in AF This week I continued to work on my agriscience fair project. I have been working mainly on the written report and starting this week I will begin to put the project board and log book together.	1.00		
1/27/2019	Apply physical science principles and engineering I have been in the process of completing my Written Report. Through doing this I am learning the skills to properly complete my written report. I will also be beginning my log book soon.	2.00		
1/13/2019	Apply physical science principles and engineering Due to Cemex not allowing me to test the full extent of my agriscience fair project! with the help of my advisors had to find a new way to word it. Cemex has a new fine" of concrete enhancer called AdMixture. They tested my control group and 50/50 as well as a control with AdMix through a Slump test. Fun Fact the first AdMix plant ever but also to provide all Cemex plants globally was opened in Brooksville, our home town.	1.00		
12/16/2018	Apply physical science principles and engineering I began my agriscience fair project by going to Cemex and making the samples to be tested. It will take 28 days for all of the test to become complete.	4.00		
9/26/2018	Apply physical science principles and engineering During club day we began to work on the next part of our Agriscience Fair Project. I began working on my hypothesis. After rewriting it five times I finally got it just right. I then worked on the purpose which was pretty easy and I only had to redo it a few times. After that I worked on the title it was either "funny" or serious, I decided to use the more serious one. It was also the better fit one. So overall I think my project will turn out pretty good.	2.00		
9/23/2018	Apply physical science principles and engineering I found out that I actually know someone who works at Cemex. She also knows the person that is in charge. As I was talking to her she has been in contact with the lab manager and they are willing to alter the in. They are also willing to allow me to use what I need (As long as it is actually needed.) I am really excited to able to work with the people at Cemex and also to be able to test and find out the results of this project!	1.00		
3/30/2018	Plan, build and maintain AFNR structures. I have figured out the project I will be doing. I will create concrete with recycled materials instead of the industry standard aggregates. After creating the concrete I will test it and see if it will hold up to as many pounds per square inch as concrete with the industry standard aggregates.	1.00		
8/27/2018	Apply physical science principles and engineering After multiple times of writing my question, I was finally able to get it just right. My teachers Ms. Nelson and Mr. Ahrens both approved of my question for the project.	1.00		
	Total Entries: 20	287.00		

Journaled Skills	# Entries	# Evals	Avg Eval
PST.01.01 Apply physical science and engineering principles to assess and select energy sources for AFNR power, structural and technical systems.	4	0	
Total (Evaluation: 1=Limited, 2=Basic; 3=Proficient; 4=Exemplary)	4	0	

Operating Expense - The Affects of Ground Glass in Concrete					
Date					
11/28/2018	Supplies amazon.com	Ground Glass/ 17.22 per 5 LBS.	\$86.10		
2/23/2019	Supplies Amazon/Walmart		\$200.00		

Operating Income - The Affects of Ground Glass in Concrete						
Date		Memo				
2/23/2010	Poe Fund Parente		\$286.00			

Profit/Loss Report - The Affects of						
Ground Glass in Concrete	2018	2019	2020	2021	2022	Total
1. Revenues from Operations						Total
Beginning Current Inventory		\$0	\$0	\$0	\$0	
Market Inventory Adjustments						
Ending Current Inventory						
Change in Current Inventory						
Research Funding		\$286				\$286
Gross Cash Revenues		\$286				\$286
Gross Non-Cash Revenues						
Gross Revenues		\$286				\$286
2. Expenses from Operations						
Supplies	\$86	\$200				\$286
Contract/Custom						
Total Cash Expense	\$86	\$200				\$286
Non-Cash Contract/Custom						
Total Non-Cash Expense						
Total Operating Expense	\$86	\$200				\$286
3. Net Income from Operations	(\$86)	\$86				\$0
Journaled time (hours)	9.0	32.0		246.0		287.0
Net Current/Operating Income per Hour		\$3				