

Plant Systems Interest In A Supervised Agricultural Experience (SAE)

Ideas for developing a plant science-related SAE

Plant Systems Overview

- According to the National Council for Agricultural Education, Plant Systems (PS) is described as:
 - ...*competence in the application of scientific principles and techniques to the production and management of plants.*
- Your interest in this area represents a wide range of opportunities related to the production, management and research related to plant/crops.



Areas Of Interest In Plant Systems

- Landscaping, turf grass and floriculture... which includes:
 1. Production of products for the industry
 2. Sales of products in the industry
 3. Other areas including management, safety and other areas
- Forage... which could include:
 1. Forage production such as hay or other forage crops in the field
 2. Sales of products in the industry
 3. Other areas including management, safety and other areas
- Forestry... which could include:
 1. Forestry production such as lumber or other
 2. Sales of products in the industry
 3. Other areas including management, safety and other areas



Areas Of Interest In Plant Systems (Cont.)

- Vegetable/Fruit Crops... which could include:
 1. Production of plants or products for the industry
 2. Sales of plants or products in the industry
 3. Other areas including management, safety and other areas
- Grain crops such as corn, milo, wheat or sorghum... which could include:
 1. Production of seed, plants or products for the industry
 2. Sales of seed, plants or products in the industry
 3. Other areas including management, safety and other areas



Summary Of Skills Associated With Plant Systems

The ability to:

- Classify plants according to taxonomy systems
- Apply knowledge of plant anatomy and the functions of plant structures to activities associated with plant systems
- Apply knowledge of plant physiology and energy conversion to plant systems
- Determine the influence of environmental factors on plant growth
- Develop and implement a fertilization plan for specific plants or crops
- Demonstrate plant propagation techniques
- Develop and implement a plant management plan for crop production.



Summary Of Skills Associated With Plant Systems

- Develop and implement a plan for integrated pest management
- Apply principles and practices of sustainable agriculture to plant production
- Harvest, handle and store crops
- Create designs using plants



Connect Your Interests To Your Project

Entrepreneurship	Placement	Research	Foundational
A plant-related business or for-profit venture	An plant-related work experience	A research project related to a plant issues	A plant industry learning experience for careers or an increase knowledge
Time is invested	Time is invested	Time and money (If applicable) are invested	Time is invested
Money is invested & at risk; Provides opportunity to learn and possibly earn a profit in the plant industry	Provides opportunity to learn & possibly earn a paycheck within a plant industry work experience	Provides opportunity to learn about plant science research	Provides opportunity to learn through exploring areas of the plant industry



Plant Systems-Related Projects Ideas:



Entrepreneurship Examples		Placement Examples	
Farming grain crops	Owning a flower arrangement business	Working for hay production business	Working at a flower arrangement shop
Growing and or selling forage crops	...other ideas where your project is related to a plant industry situation	Working for a crop services business	...other ideas where your project is working in an area that is related to the plant system
Crop services business		Working for a seed company	
Fertilizer or chemical sales business		Working for a crop consulting business	



Plant Systems-Related Projects Ideas:



Research Examples		Foundational Examples	
Hay yield research project - temperature	Flower growth research - varying measures of light	Chemical applicators license	Master Gardener Program (USDA)
Crop production research - irrigation techniques	Fruit shelf life from varying seed varieties	Job shadowing - grain crop producer	...other ideas where your project is related to learning about the plant system through an educational activity
Plant pest control research - low impact techniques	...other ideas where your project is related to a research project in the plant system	Plant identification and management experiences	
Flowering techniques research - varying temperature		Community garden project	



Does Plant Systems Align To Your Interest?

- Your project should be:
 1. Based upon your interests
 2. Connected to your agricultural education courses

If YES, continue to the student examples section. Also, complete the "Explore Your SAE" interactive builder tool and finally, develop an SAE Plan draft based on your results.

If NO, explore another area to determine your interests!

