



Agriculture Pathway 101

Freshman Experience

FRESHMAN EXPERIENCE

Monday, December 2nd



Materials Needed

Bellwork
Pencil
chromebook

To Do

Open Notes

Today's Focus

AgriScience

Bellwork

What do you think the term “agriscience” means?

Agriscience Is...

- ▶ **the application of science to agriculture**
- ▶ the “why” and “how” things are done (it is science in action!)
- ▶ Animals, plants, chemicals, soil, and machinery all involve science in some way.
- ▶ For Example: In order to design a piece of harvesting equipment knowledge of plants (*biological science*), soil (*earth science*), and mechanics (*physical science*) are required.

What are Agriculture Classes About?

- Explore agriculture, animal science, horticulture, soil conservation, and mechanics in a real-world agriculture lab
- Manage a greenhouse and create nutritional plans for plants, animals, and people
- Work with experts in the field of agriculture and take a leadership role by participating in exciting FFA activities



Agriscience Pathway Courses

Ag 1

Introduction to Agriculture: Livestock, Gardening, Ag Careers, FFA competitions, Leadership events, Woodworking & Welding.

Ag 2

Biology through the Agriculture 'Lense' which discusses Cells to Genetics, Insects to Ecology with Woodworking, Welding and Concrete skills added in

Ag 3

Advanced Plant and Animal Science: Advanced Livestock Management (including Animal Health & Nutrition); Advanced Plant Production (Hydroponics, Greenhouse Production, Gardening); Ag Mechanic Project Construction

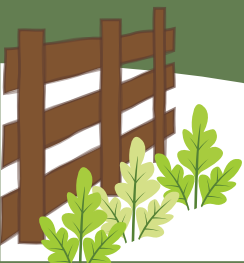
Ag 4

Personal Financial Literacy & Business Management - through running a School Based Agriculture Business during class



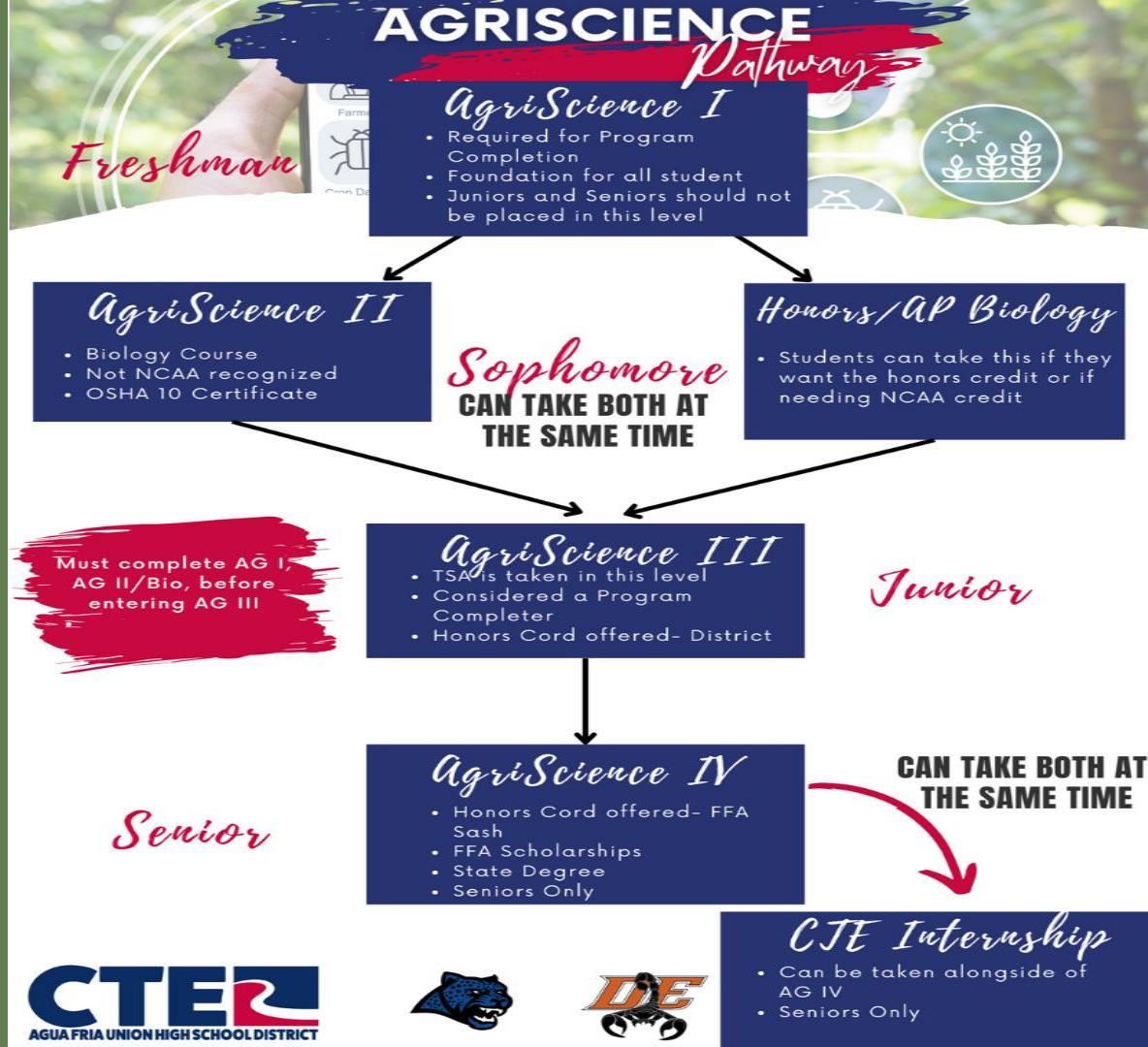
Can I get Dual enrollment credit?

Yes! A total of 11 Credits from taking all 4 courses.





What should
you take?



Ag Career Pathways



Agribusiness Systems



Animal Systems



Biotechnology Systems



Environmental Service
Systems



Food Products &
Processing Systems



Natural Resources
Systems



Plant Systems



Power, Structural &
Technical Systems



Agricultural Education

Career Pathways

- Agribusiness System
- Agriculture Communication and Education
- Animal Systems
- Biotechnology Systems
- Environmental Service Systems
- Food Products and Processing Systems
- Natural Resources Systems



Careers

- **Agricultural Engineer** - Designing and improving farming equipment and machinery.
- **Agronomist** - Specializing in soil management and crop production.
- **Farm Manager** - Overseeing farm operations and production.
- **Animal Scientist** - Researching animal genetics, nutrition, and breeding.
- **Agricultural Technician** - Assisting in agricultural research and managing data.
- **Food Scientist** - Studying food processing, safety, and preservation.
- **Horticulturist** - Growing and caring for plants, including fruits, vegetables, and ornamental plants.
- **Agricultural Sales Representative** - Selling agricultural products and equipment.
- **Sustainable Agriculture Specialist** - Focusing on environmentally friendly farming practices.



What do These Careers Look Like?

Agricultural Engineer



Animal Scientist



Agricultural Technician



Agronomist



Farm Manager

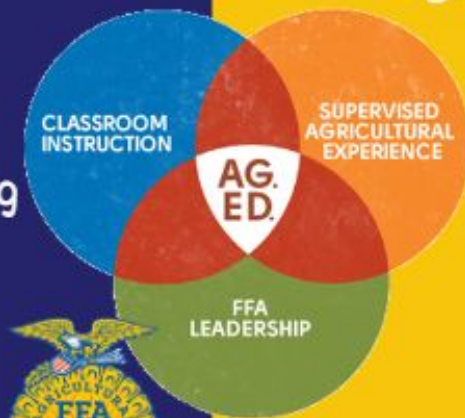


What is FFA?



Classroom:

- Plants
- Animals
- Welding
- Woodworking
- Biology



FFA:

- Chance to Travel
- Competitions
- Contests
- Conferences

SAE:

- EARN MONEY! \$\$
- Explore future jobs
- Earn awards



Facilities

- Orchard
- Greenhouse
- Aquaculture Tanks
- Gardens
- Mechanics Equipment
- 3 laboratory classrooms
- Future Livestock Barns



What's in it for me?

- Career Development Event teams
- Speaking Contest
- Chapter Meetings
- Community Service opportunities
- Regional Events
- Networking
- Leadership Development
- Field Trips



Examples Student Projects



