

# PRINCIPLES OF AGRICULTURAL SCIENCE—PLANT

# **Course Description**

Agricultural Science - Plant (ASP) introduces students to career opportunities in the agronomic, forestry, and horticultural industries.

Students experience hands-on activities related to plant anatomy, physiology, and classification. While enrolled in ASP, students acquire the fundamental skills to produce and harvest plants. Throughout the course, students will apply scientific principles to improving and monitoring plant production.



## **Equipping teachers**

- Foundation level
- Full year course
- Inquiry and project based instructional practices
- CASE Institute professional development

# **Engaging students**

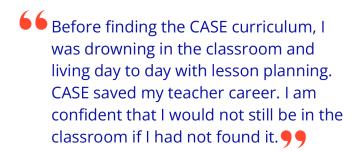
- ✓ Develop a plant management guide
- Explore plant science careers and technical skills
- Open Demonstrate lab safety and practices
- Use science, technology, engineering and math, to solve problems

## **Instructional Units**

- Worlds of Opportunity
- Mineral Soils
- Soilless Systems
- Anatomy and Physiology
- Taxonomy
- The Growing Environment
- Plant Reproduction
- Surviving a Harsh Environment
- Crop Production and Marketing

# Flexibility & Adaptability

CASE provides a comprehensive professional development experience, in addition to a work-life balance so teachers can best educate their students. Course work is adaptable and customizable based on teacher preference to fit all geographies and communities.



- Anita DeWeese, Kansas



scan or visit case4learning.org



**Equipping Teachers Engaging Students** 





## **Purposeful Curriculum**

CASE has sequenced courses at four levels that enhance the delivery of agricultural education through inquiry-based learning and technical skills.

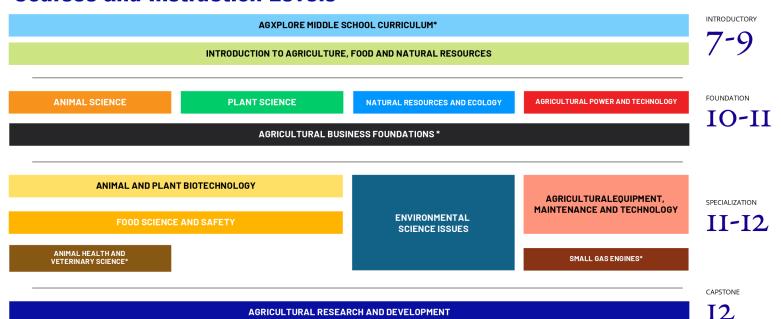
### **Mission**

To design industry-leading, inquiry-based curriculum and teacher education to create lifelong learners and prepare students for the future of agriculture.

## **Standards Aligned**

CASE develops curriculum with industry feedback and aligns courses to National Agriculture, Food, & Natural Resources and Career & Technical Education standards.

## **Courses and Instruction Levels**



# **Professional Development and Lifetime Certification**

CASE 4 Learning enhances agricultural education with inquiry and project-based learning to prepare the next generation of the agricultural workforce through teacher certification and professional development.

#### **CASE Institutes**

Professional development events preparing teachers to implement full-year CASE courses. Institutes provide teachers the content and skills needed to use CASE curricula in their classroom. CASE Institutes range from five to eight days in a hybrid, in-person, or virtual format.

## **BriefCASEs** \*

Professional development for shortened CASE courses or modules. BriefCASEs range from one to three days.

### **Grants & Scholarships**

Corporate sponsors and donors throughout the agriculture industry support CASE teachers through funding material implementation grants and professional development scholarships. Teachers are eligible to apply in the fall to fund their programs in the following year.

#### Certification

Once the teacher is certified by attending a CASE Institute or BriefCASE, they have lifetime access. There are no subscriptions or renewal fees!



#### In-Person

Teachers attend the entire training at the host site.



#### Virtual

Teachers attend the entire training online. Teachers will receive materials via mail, and are responsible for their lab space.



#### **Hybrid**

Teachers receive training both virtually and in-person based on the course.

