



FOOD SCIENCE AND SAFETY

Course Description

During Food Science and Safety (FSS) students build content knowledge and technical skills while investigating areas of food safety, chemistry, processing, product development, and marketing. Students become proficient in food handling while using good manufacturing practices, identifying processing hazards, and conducting industry investigations.

Students maintain a research-level laboratory notebook throughout the course documenting their experiences in the laboratory.



Equipping teachers

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

Engaging students

- ✓ Create and market a food product
- ✓ Record research and labs in a scientific notebook
- ✓ Practice food science lab techniques
- ✓ Use science, technology, engineering, and math to solve problems
- ✓ Demonstrate relevant personal and lab safety practices.

Instructional Units

- Introduction to Food Science
- Food Chemistry
- The Safety of Our Food
- Processing and Preservation
- Health and Food Security
- Consumers
- Food Product Development

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.

“Sometimes, students don't like science because it is conceptual. CASE Food Science and Safety curriculum allows students to touch, taste, smell, and do their experiments alongside of their learning.”

- Jamie Christiansen, Iowa



scan or visit case4learning.org

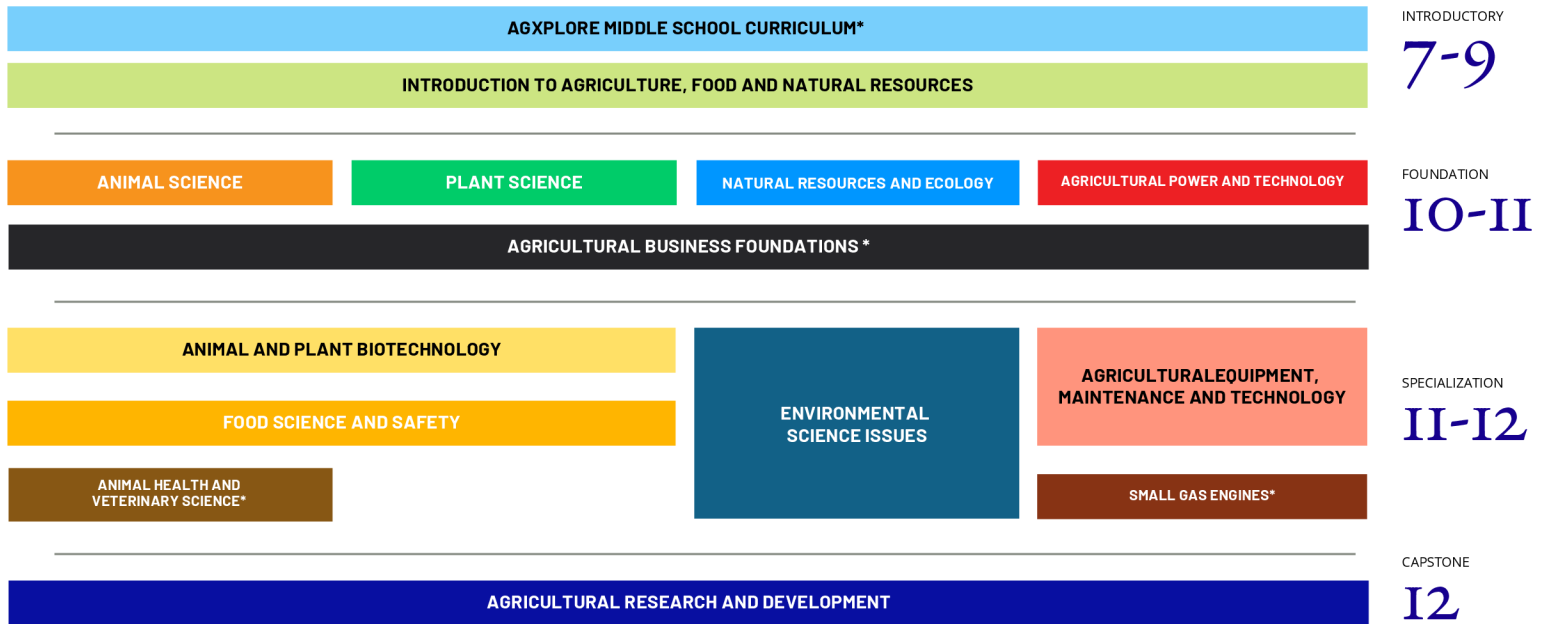
This course is correlated to G-W Principles of Food Science text



Purposeful Curriculum

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

Courses and Instruction Levels



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.

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.