CASE
Curriculum for Agricultural Science Education

CASE Course Sequences

Curriculum for Agricultural Science Education™ (CASE™) is currently developing sequences of courses representing Agriculture, Food, and Natural Resources (AFNR) pathways in agricultural technology and systems, animal science, natural resources and environmental science, and plant science. Currently work is focused on the animal and plant science pathways including the introduction and capstone courses.

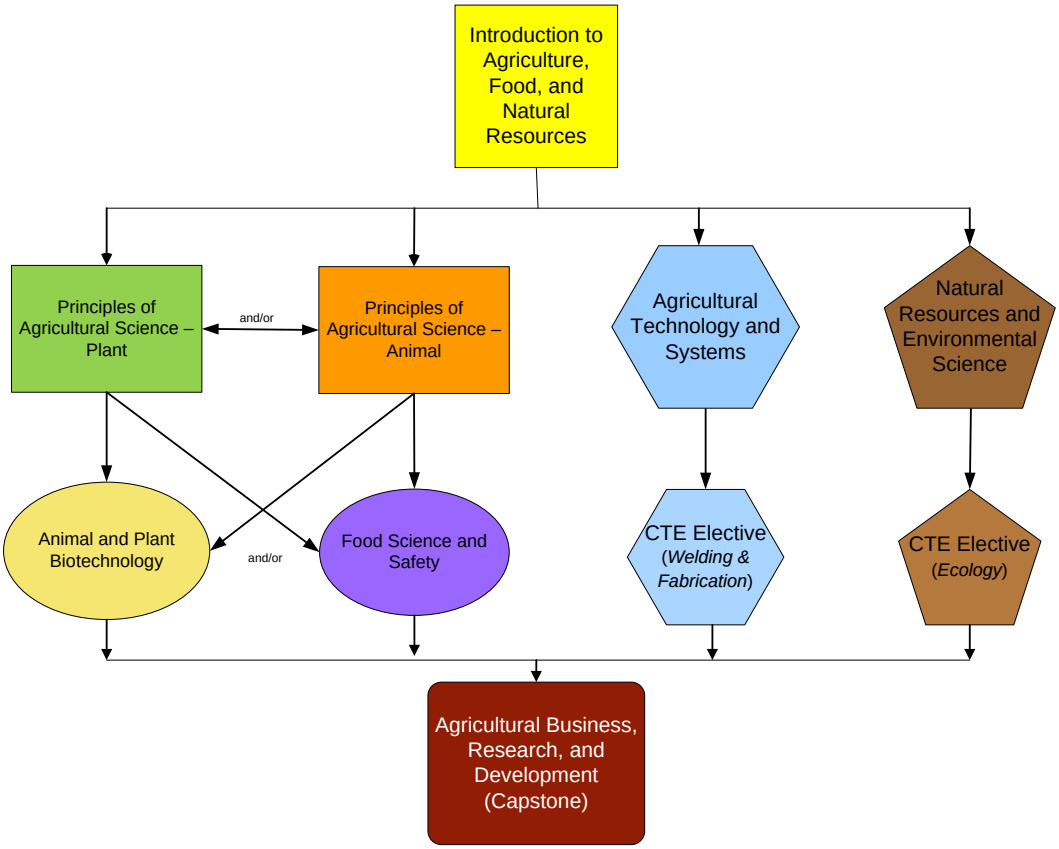

Figure 1. **CASE Pathways**

In Figure 1, four horizontal levels are shown. The first level is the Introductory level consisting of only the Introduction to Agriculture, Food, and Natural Resources course designed to provide students exposure to concepts related to all pathways of AFNR. The second level is the Foundation level and consists of four specific subject matter courses intended to build background knowledge required for students to develop an understanding of basic AFNR concepts. The third level of courses is the Specialization level that refines technical skill attainment and develops a deeper understanding of AFNR subject matter. The final level is the capstone course that applies the knowledge and skills learned throughout to practical purposes of agribusiness and research.

Figure 1 illustrates the pathways and defines the requirements for CASE Programs of Study. Specifically, a CASE Program of Study requires a minimum of one course from each level to constitute a program of study. The identified program of study allows for common assessment of programs within each state and across the nation. The common assessment allows for data collection of student performance for AFNR programs based on a consistent and uniform set of measurable concepts regardless of the specific AFNR context local programs opt to teach.

In addition to providing a logical sequence of courses and a common assessment tool for AFNR subject matter, each CASE course provides increased rigor and relevance for student competency. Science and mathematics are enhanced in a deliberate method to provide the integration of science and mathematics into Career and Technical Education (CTE) that Perkins requires. CASE curricula provide the answers for many requirements of CTE policy and provide the roadmap for the instruction of core AFNR concepts to develop well-educated and highly skilled graduates.

To ensure the quality of the instruction related to each course of the sequence, teachers must successfully complete 80 hours of professional development for each CASE course. The professional development provides background to teachers for effective teaching using activity-, project-, and problem-based instruction, inquiry-based instruction, enhancement of science and mathematics in context, and the use of the CASE resources.

By providing teachers a solid curriculum resource, specific professional development, and assessment tools, the stage is set for increased student performance. This assurance of quality allows students to become CASE certified and provides a clear and seamless way to grant students post-secondary articulation credit.

For more about the CASE model and CASE courses in development, please view the website at **www.case4learning.org**.