

WANT TO START USING CASE IN YOUR AGRICULTURAL EDUCATION PROGRAM?



Attend a CASE Institute!

CASE Institutes are 80-hour professional development sessions led by practicing CASE teachers. CASE curriculum is free to those who attend and successfully complete a CASE Institute. Affiliate Universities and Colleges across the United States host CASE Institute sessions each summer. CASE teachers receive free updates of the curriculum and are entitled to many other teacher services free of charge during their career.

For a complete listing of CASE Institutes for the upcoming summer and more information about certification, please visit the CASE website at <http://case4learning.org/professional-development/case-institute.html>.



CASE

300 Garrigus Building • Lexington, KY 40546
Phone: 800-509-0204 • Fax: 859-323-3919
www.case4learning.org • info@case4learning.org

CASE

*Curriculum for Agricultural
Science Education*



Animal and Plant Biotechnology

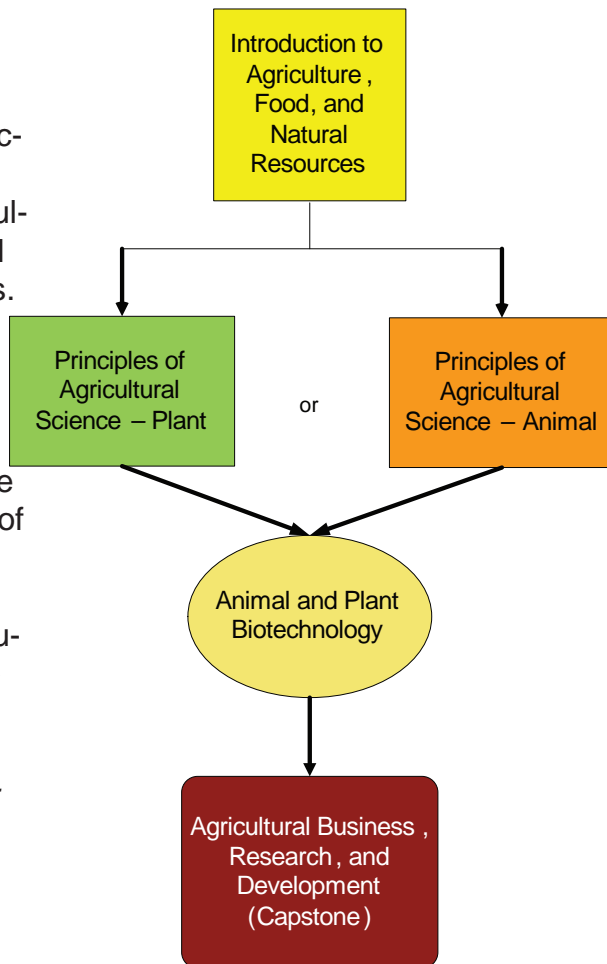


CASE

PROGRAM OF STUDY

Perkins reauthorization recommends program of study for CTE students. One important aspect of program of study pathways is to provide a purposeful and rigorous sequence of courses to build student knowledge and skills. CASE has carefully designed a program of study pathway for animal science that scaffolds student learning within courses and throughout the pathway.

All CASE pathways begin with the introductory level course and branch into four agriculture, food, and natural resources focus areas. Schools have the option of offering the animal or plant foundation level course leading into the specialization course of *Animal and Plant Biotechnology*. All CASE pathways cumulate with the capstone course focusing on *Agricultural Business, Research, and Development*.



For more information regarding CASE programs of study, please visit the CASE website at <http://case4learning.org/curriculum/case-pathways.html>

ANIMAL AND PLANT BIOTECHNOLOGY

Animal and Plant Biotechnology, a specialization course in the CASE Program of Study, provides resources to the teacher to facilitate rigorous instruction and increase the level of student understanding related to biotechnology concepts. Students will complete hands-on activities, projects, and problems designed to build content knowledge and technical skills in the field of biotechnology. Students are expected to become proficient at projects involving micropipetting, bacterial cultures and transformations, electrophoresis, and polymerase chain reaction. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations. CASE resources and professional development provide extensive preparation for the teacher to be proficient and confident in their ability to provide proper instruction of biotechnology skills and concepts.

Areas of study include:

- Background and Safety
- Cells
- DNA
- Transformation
- Applications for Agriculture
- Research in Biotechnology



Please note coursework in biotechnology requires prerequisites.