

MAJOR IN AGRICULTURAL BIOLOGY, PLANT PATHOLOGY CONCENTRATION

The Agricultural Biology major with a concentration in Plant Pathology provides a strong scientific foundation in plant pathology to address challenges in natural and managed systems. Students will gain tools to foster sustainability and address pressing issues involving biophysical and sociocultural components of these systems. The major features courses in agriculture, biology, and ecology as well as practical training through internships and/or research experiences. Students will learn the complex interactions that occur among microbes, insects, and plant species in natural and managed ecosystems and develop skills to use systems thinking to solve real-world problems. Knowledge and skills gained from the major will enable students to identify and solve complex problems in natural and managed systems, especially implementing effective and sustainable pest management.

Learning Outcomes

- Integrate skills and knowledge to solve problems related to plants, insects, and microbes in natural and managed ecosystems
- Demonstrate understanding of social, economic, and biophysical aspects of the management of biological problems in natural and managed ecosystems
- Describe, assess, analyze, and synthesize knowledge from across the curriculum to create solutions for pests and beneficial species in natural and managed ecosystems
- Promote and practice inclusion to form effective teams that solve complex problems in natural and managed ecosystems
- Communicate effectively with diverse audiences regarding sustainable pest and pathogen management in natural and managed ecosystems

Potential Occupations

This major will be an excellent choice for students interested in careers as researchers, crop advisors, extension educators, growers, agriculture consultants, production managers, inspectors, diagnosticians, regulatory professionals and for those who wish to pursue careers in academia.