PLANT SCIENCE

Plant science is a diverse major offered collaboratively by the departments of Agronomy, Entomology and Nematology, Environmental Horticulture, Plant Pathology, and Soil and Water Sciences. Students may earn B.S. or B.A. degrees, depending on their specialization. B.S. specializations include Native Plant Conservation, General Plant Science, Greenhouse and Landscape Industries, Plant Breeding and Genetics, Soil Management and Plant Productivity, Sustainable Crop Production and Turfgrass Science. The B.A. specialization is Community Food Systems.

About this Program

- **College:** Agricultural and Life Sciences
- **Degrees:** Bachelor of Arts | Bachelor of Science
- **Credits for Degree:** 120
- **Specializations:** Community Food Systems | General Plant Science | Greenhouse and Landscape Industries | Native Plant Conservation | Plant Breeding and Genetics | Soil Management and Plant Productivity | Sustainable Crop Production | Turfgrass Science
- **Additional Information**
- **Related Plant Science Programs**

To graduate with this major, students must complete all university, college, and major requirements.

The plant science major, offered jointly by the departments of Agronomy and Plant Pathology, enables students to apply principles associated with production and improvement of agronomic crops. Students will acquire knowledge about the scientific fundamentals of plant growth of field and forage crops. They will acquire knowledge about fungi, bacteria and viruses, as well as environmental factors that cause plant disease. This program prepares students to work in the lab and field settings and to develop applied skills for research and extension.

Before Graduating Students Must

- Complete a research paper and an oral presentation with satisfactory faculty evaluation.
- Achieve minimum grades of C in AEC 3030C and AEC 3033C. These courses are graded using rubrics developed by a faculty team.
- Complete requirements for the baccalaureate degree, as determined by faculty.

Students in the Major Will Learn to

Student Learning Outcomes (SLOs)

**Content**

1. Describe plant growth and development in terms of plant morphology and physiology and evaluate the abiotic and biotic factors that impact plant growth and management.
2. Recommend practices that growers and managers can implement to address the abiotic and biotic components of their cropping system.

**Critical Thinking**

3. Analyze and apply science-based data to solve problems in plant production, distribution and/or utilization.
4. Design and evaluate a project that addresses a problem or challenge related to their area of interest.

**Communication**

5. Create, interpret and analyze written text and multimedia presentations.
6. Communicate effectively through oral and multimedia presentations.

Curriculum Map

I = Introduced; R = Reinforced; A = Assessed

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**Assessment Types**

- Standardized post-test
- Capstone and individual projects
- Final grades