

PLANT PATHOLOGY, B.S.

Plant pathology is the study of plants and their pathogens, the process of disease, and how plant health and disease are influenced by factors such as the weather, nonpathogenic microorganisms, and plant nutrition. It encompasses fundamental biology as well as applied agricultural sciences.

Plant pathology involves the study of plants and pathogens at the genetic, biochemical, physiological, cellular, population, and community levels, and how the knowledge derived is integrated and put into agricultural practice. Prerequisite to effective research, teaching, and extension in plant pathology is a breadth of interdisciplinary interest and knowledge, in a department and in its individual members, reaching from ecology to microbiology, from meteorology to applied mathematics, and from molecular biology to communication skills.

Learn through real-world, hands on experiences

Plant Pathology students learn in many field and lab courses, including classes that focus on economics of plant disease, interactions between plants and people, fungi, organic agriculture, and global food security. They can also take part in a summer field course, numerous internships, and research opportunities.

Build community and networks

Plant pathology is a field that thrives in, and makes its greatest contribution to, comprehensive institutions like the University of Wisconsin–Madison where the proximity and complementarity of basic sciences and the other applied agricultural sciences are exceptionally strong. Please visit the department's Extension and Outreach (<https://plantpath.wisc.edu/extension-overview/>) overview page for additional details on the departments outreach activities, public education programs, and student organizations.

Customize a path of study

Undergraduates in plant pathology can choose between two tracks. The plant–microbe biology track has courses in basic math and sciences, including biology, chemistry, and physics, along with upper-level courses in plant pathology, biochemistry, and microbiology. This track is geared toward students who have an interest in receiving a broad education in the basic sciences or plan to pursue a graduate or professional degree.

The plant health and industry track includes some courses in basic math and sciences, as well as additional courses in agriculture and economics/management and upper-level courses in plant pathology, entomology, and other agricultural sciences. This track is designed for students who intend to work in industry after receiving their undergraduate degree.

Students are also able to explore double majors and a multitude of undergraduate certificates based on their unique educational and professional interests. More information about careers in plant pathology is available from the department.

Make a strong start

Freshman who are interested in Plant Pathology are encouraged to participate in a First-Year Interest Group (<https://figs.wisc.edu/what/>) (FIG) program. Topics of interest to Plant Pathology students include global food security, plants and human well-being, and many

other fascinating options. See the latest Choose Your FIG (<https://figs.wisc.edu/choose/>) catalog for details.

Gain global perspective

One of the department's most popular courses is **Plant Path/Botany 123: Plants, Parasites, and People**. This course highlights the interaction between society and plant-associated microbes. Students explore global issues including the Irish potato famine, pesticides in current agriculture, the role of economics and consumer preference in crop disease management and the release of genetically engineered organisms. This course meets CALS International Studies requirement.

Additionally, the Plant Pathology program is a great choice for students who wish to participate in a study abroad experience. Students can choose from a multitude of destinations world-wide, and can travel abroad during summer, spring, or fall terms.