

PLANT PATHOLOGY, PH.D.

LEARNING OUTCOMES

1. Demonstrate an understanding of the basic processes of pathogenesis, plant defense, and defense circumvention at the molecular, genetic and physiological level for each of the major groups of plant pathogens and other plant associated microorganisms.
2. Demonstrate an understanding of the basic biology of microorganisms that are symbiotic with plants including fungi, bacteria, viruses, oomycetes, and nematodes.
3. Demonstrate an understanding of the etiology, ecology, and epidemiology of economically significant diseases caused by the major groups of plant pathogens.
4. Construct disease management strategies for the different groups of important plant pathogens.
5. Demonstrate excellent problem solving skills and a deep conceptual understanding of the science of Plant Pathology.
6. Convey knowledge in a variety of formats to diverse audiences including the public, students, and fellow scientists.