



Course Number	ENVS 3311 Plant Pathology
Course Name	
Credit Value (Breakdown of theory and lab credits)	3 Theory
Catalog Course Description	You will study the historical foundation of plant pathology and will evaluate the current and future nature of plant disease and its causal agents (fungi, bacteria, viruses, nematodes, environmental/chemical agents) and of symbionts and their effect on plant health and disease resistance, epidemiological considerations on disease spreading and major outbreaks, and disease control and management techniques.
Course Student Learning Outcomes/Objectives /Competencies	<ol style="list-style-type: none"> 1. Knowledge of the major pathogen groups on the basis of phylogeny, morphology and physiology. 2. Identify stages of disease development and describe the various modes by which each pathogen group achieve disease development. 4. Describe mechanisms that pathogens affect plants and how plants defend against infection 5. Discuss how host resistance to diseases can be improved by altering pathogen-plant interactions 6. Identify the environmental factors conducive to pathogen activity and host response to infection. 7. Describe the impact of agricultural practices on pathogen populations and disease environment 8. Understand treatment types to limit impact of pathogens and their limitations
College-Wide Student Learning Outcomes measured (General education courses only)	
Program Student Learning Outcomes measured	<ol style="list-style-type: none"> 1. Apply systems theory, concepts, and methodologies to critically analyze and understand interactions on an ecological level.