



UNIVERSITÀ DI PAVIA

Anno Accademico 2017/2018

PLANT PATHOLOGY	
Enrollment year	2015/2016
Academic year	2017/2018
Regulations	DM270
Academic discipline	AGR/12 (PLANT PATHOLOGY)
Department	DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCES
Course	NATURAL SCIENCES AND TECHNOLOGIES
Curriculum	PERCORSO COMUNE
Year of study	3°
Period	2nd semester (01/03/2018 - 13/06/2018)
ECTS	6
Lesson hours	48 lesson hours
Language	Italian
Activity type	ORAL TEST
Teacher	PICCO ANNA MARIA (titolare) - 6 ECTS
Prerequisites	For a proper understanding of the topics of the Plant Pathology course, basic knowledge in plant biology, botany, mycology and plant physiology is desired. At Pavia University students acquire these prerequisites during the first year of the course (General Botany), the second year of course (Systematic botany, in which one part is dedicated to mycology) and the third year, first semester (Plant Physiology).
Learning outcomes	The course aims to provide students with the required knowledge and skills to recognize the most common diseases of cultivated and wild plants through in-depth knowledge of the biological cycles of pathogens, of the host-parasite relationships and of the pathogen's nutritional needs.
Course contents	The course will focus on the following items: Importance of plant disease. Concept of disease; disease triangle; effect of environmental conditions on pathogen and host; host susceptibility;

	<p>virulence and specialization of the pathogen. Classification of Plant Diseases. Biotic and abiotic diseases. Development of plant diseases. Transmission of pathogens; host plant/pathogen relationships. Symptoms. Infectious diseases. Viruses and viroids. Bacteria and phytoplasmas. Oomycete (Cromista): basic features, mode of infection. Fungi: basic features, classification, mode of infection, diagnosis, mycotoxin production. Introduction to Aerobiology. Elements of epidemiology. Fungal endophytes. Plant disease management and control.</p>
Teaching methods	<p>Lectures (48 hours) also aimed in involving students through specialized seminars on topical issues, symptom analysis, diseased specimens analysis supported both with direct observation and visual aids.</p>
Reccomended or required readings	<p>Slides shown during the lessons; scientific papers and review articles from the international literature</p> <p>Recommended books:</p> <p>Recommended books: Belli Giuseppe - Elementi di patologia vegetale - Seconda edizione - Editore: Piccin-Nuova Libreria. George N. Agrios - Plant Pathology, Fifth Edition – Academic Press Essential Plant Pathology, Second Edition - By Gail L. Schumann and Cleora J. D'Arcy</p>
Assessment methods	<p>The plant pathology examination is oral and is foreseen for all students after the end of the course lessons. The exam provides three or four questions on different topics dealt with during the lessons. The final grade is awarded on the basis of the degree of preparation of the student, his critical skills and his ability to make connections between different topics.</p>
Further information	
Sustainable development goals - Agenda 2030	<p>\$lbl legenda sviluppo sostenibile</p>