

New Mexico State University
Department of Entomology, Plant Pathology, and Weed Science

Monday 1:30-2:20 pm|
Monday 2:30-5:20 pm| Skeen Hall - Room W139
Friday 1:30-2:20 pm|

SYLLABUS FALL 2009 / EPWS 492-AGRO 492-HORT 492

Instructor: Dr. Soum Sanogo
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TEXTBOOK: There is no required textbook for this course. The instructor will provide handouts as needed to complement lectures. Students are encouraged to consult pertinent materials in NMSU libraries.

COURSE DESCRIPTION: House plants, gardens, lawns, orchards, pastures, field crops, golf courses, and forests are subject to a wide array of disorders caused by several biotic and abiotic agents. This course will explore the nature of disorders in plants and their causal agents through a combination of lectures and laboratory sessions. Laboratory exercises will be limited and will consist of field trips and examining specimens collected in fields, greenhouse, gardens, etc...The class will be graded on in-class exams, quizzes, and laboratory notebooks.

COURSE OBJECTIVES:

1. To describe the major types of plant disorders
2. To identify the biotic and abiotic agents causing plant disorders
3. To define the approaches used in diagnosing plant disorders

COURSE POLICIES AND PROCEDURES:

1. Exams- A total of three (3) exams will be given throughout the entire semester. All tests materials will be based on lectures, handouts, and laboratory exercises. Each test will be assigned a total of 100 points.
2. Quizzes- Five (5) quizzes will be given throughout the semester. Each quiz will be worth 20 points, and will be based on lectures, handouts, and laboratory exercises.
3. Laboratory notebooks – Each student will be required to provide a notebook containing description of five (5) plant disorders in each of the following four (4) categories: 1) Pathogens and Weeds; 2) Nutrient Deficiency and Toxicity; 3) Insects; and 4) Aerial and Edaphic. Overall, each student will compile a notebook of 20 specimens of plant

disorders. For each disorder, the following information is required: **1)** Name of the plant (common name and scientific name); **2)** a photograph of the plant with disorder (s); and **3)** a description of the disorders (*no less than five complete sentences*) to include the following: i) symptoms; ii) the extent of the disorder (s) (How much of the plant is affected? How much of the field/greenhouse is affected?); and iii) causal agent (s). All the required information should be presented using a format to be provided by the instructor. The notebook is worth 100 points.

4. Individual Term Paper. Each student will be required to write a term paper on a topic selected by the instructor. Guidelines for the format of the term paper will be provided by the instructor. The term paper will be worth 100 points.
5. Attendance/Class participation. Regular attendance is required in the class. Students should take the steps to inform the instructor about their anticipated absence. Class participation in discussions is highly encouraged.

GRADING/GRADING SCALE:

Category	Maximum Points
Exams (3), 100 points each	300
Quizzes (5), 20 points each	100
Notebook	100
Term Paper	100
TOTAL	600

- A=540-500
- B=480-539.9
- C=420-479.9
- D=360-419.9
- F=359.9 and below

COURSE SCHEDULE*

Dates	Lecture and Laboratory Topics
August 24	Introduction and Review of Course Objectives and Syllabus General Considerations in Diagnosing Plant Disorders
August 28	Types of Plant Disorders
August 31	
September 4	Types of Plant Disorders
September 7	Labor Day – No Class
September 11	Types of Plant Disorders
September 14	
September 18	Abiotic Agents – General Considerations / Aerial and Edaphic Agents
September 21	Abiotic Agents – Nutrient Deficiency and Toxicity Guest Lecturer: G. Picchioni, Plant and Environmental Sciences
September 25	Review of Materials: Types of Plant Disorders and Abiotic Agents
September 28	EXAM # 1
October 2	Biotic Agents – General Considerations
October 5	Biotic Agents – Nematodes Guest lecturer: S. Thomas, Nematologist, Entomology-Plant Pathology- Weed Science
October 9	Biotic Agents – Fungi and Bacteria
October 12	Biotic Agents – Viruses Guest Lecturer: Rebecca Creamer, Plant Virologist, Entomology-Plant Pathology-Weed Science
October 16	Biotic Agents – Insects Guest Lecturer: Scott Bundy, Research Entomologist, Entomology-Plant Pathology-Weed Science

October 19	Interactions Among Multiple Agents and Impacts on Diagnosing Plant Disorders
October 23	
October 26	Biotic Agents – Weeds Jamshid Ashigh, Extension Weed Specialist, Extension Plant Science
October 30	EXAM # 2
November 2	Approaches to Diagnosing Disorders Guest Lecturer: Brad Lewis, Consultant Agricultural Entomologist
November 6	Laboratory Activities / Work on Notebook and Term Paper
November 9	Approaches to Diagnosing Disorders Guest Lecturer: Natalie Goldberg, Extension Plant Pathologist, and Director of NMSU Plant Diagnostic Clinic
November 13	Approaches to Diagnosing Disorders Guest Lecturer: Marvin Clary, Agronomist and Crop Consultant, Border Foods, Deming
November 16	Laboratory Activities / Work on Notebook and Term Paper
November 20	
November 23	Thanksgiving Break – No Class
November 27	
November 30	Approaches to Diagnosing Disorders Guest Lecturer: Phil Banks, Consultant Weed Scientist and Business Owner, Marathon Agricultural & Environmental Consulting
December 4	Notebooks and Term Papers due
December 7	EXAM # 3 (Comprehensive)

* The instructor reserves the right to make announced changes in the course schedule.