Mercer County Community College
Science and Health Professions Division
OHT 204 – Plant Diseases
Course Outline
Fall 2007

Credits: 3
Lecture Hours: 2
Laboratory Hours: 2

Course Coordinator: Amy E. Iseneker, Assistant Professor
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Required Text: *Plant Pathology*; George N. Agrios

Catalog Description: An introduction to the history, economic importance, symptoms, causal agents and management of plant diseases. Labs will include the isolation, culture and identification of plant pathogens.

Pre-requisites: OHT 101 or permission of the coordinator

Grading: Grades will be based on the following system

Midterm Exam	150 points
Final Exam	150 points
Lecture Quizzes	100 points
Lab Reports	120 points
Lab Practical	100 points
Semester Project	100 points
Total	720 points

Explanation of the Points System:

Lecture Exams – The midterm exam will be given in lecture and is based on lecture material. The final exam is cumulative with an emphasis on the second half of the course. The midterm exam date

is listed in the course outline. The date of the final exam is to be announced. I reserve the right to re-test you if a grade received is not consistent with your normal performance. You must show up on time to take your exams. If you are late to class to take an exam, and one of your classmates has already finished the exam and left the room, you will not be allowed to take it. In case of an emergency, you must call within 24 hours of the exam in order to do a make-up.

Lecture Quizzes – Quizzes will be given in lecture each week and will cover material from the previous lecture. Each quiz is worth 10 points and will be given at the beginning of lecture. The lowest quiz grade will be dropped at the end of the semester. You will not be given extra time to complete the quiz if you show up late, and no make-up quizzes will be given.

Lab Reports – Lab reports are due before you leave lab each week. You may work together in lab, however, each person must turn in a lab report form and is held accountable for the information. Each lab report is worth 10 points with the lowest grade being dropped at the end of the semester. You will be given the report form for the lab report at the beginning of each lab. If you show up late to lab, you will be given an immediate 1 point deduction.

Lab Practical – One lab practical will be given during the semester and is worth 100 points. This will require you to recall and demonstrate the lab/diagnostic skills that you have learned throughout the semester.

Semester Project – This is an open project that allows you to explore any topic within plant pathology that interests you. The guidelines given are that your project must be typed, presented, and turned in on time. Your project should be a minimum of 5 pages of text (12 pt. font, double spaced, 1" margins) and must include a bibliography. You cannot rely just on the internet as a resource! Please use articles and reference books in addition to the internet. The presentation that you make should be practiced ahead of time and should be approximately 5 minutes in length. You will lose 10 points if your project is not typed, 20 points if you do not present it, and an additional 5 points deducted for every day the project is late. If you are late to class the day of presentations, you will lose 1 point for

every minute you are late. Your grade will be based on your project and the presentation. Remember that this project is worth 100 points so it should be take very seriously!

Cell Phones – Cell phones must be turned off during lab and lecture. If they do go off, you will lose 5 points off from your semester total for every occurrence. If you have extenuating circumstances which requires your phone to be on, please notify your instructor in advance.

Lab Dress Code – You **must** wear sturdy foot wear to lab. This means no open-toe shoes, sandals or flip-flops. If you do not come dressed appropriately, you will not be able to do the lab that day and will receive a grade of "0".

Statement of Academic Integrity:
"Any student who a) knowingly represents the work of others as his/her own. B) uses or obtains unauthorized assistance in the execution of any academic work, or c) gives fraudulent assistance to another student is guilty of cheating. Violators will be penalized in accordance with established college policies and procedures." – If you are caught cheating in this course, you will receive a 0 for the assignment, and you will be turned into the Academic Integrity Committee.

Behavior Statement – I encourage participation in my course. I enjoy you asking questions and sharing your experiences. I, however, will not tolerate any of the following behaviors in my course. These behaviors will result in your dismissal from class for the day.

- Physical or verbal threatening behavior or derogatory remarks towards the instructor and/or fellow classmates.
- Using cell phones during class – this includes text messaging.
- Carrying on side conservations.

Mercer's Grading System:

A	93-100
A-	90 – 92
B+	87 – 89
B	83 – 86
B-	80 – 82

C+ 77 – 79
C 70 – 76
D 60 – 69
F 0 – 59

Course Objectives:

1. Acquaint the student with interactions between a variety of pathogens and their respective hosts.
2. Develop an understanding of the social impact that diseases have on mankind.
3. Understand the basic differences between fungi, bacteria and viruses along with the damage they cause.
4. Relate environmental conditions, proper sanitation, resistant varieties and pesticide spraying programs to disease control management.
5. Identify and become familiar with some of the most common and economically damaging diseases.

Behavioral Objectives:

1. Identify a variety of signs and symptoms.
2. Isolate a pathogen in culture and re-inoculate this pathogen on a given host.
3. Recognize the pathogenic causal agents as well as diseases caused by environmental problems.
4. Develop lab techniques necessary in the isolation and culture of pathogens.
5. Demonstrate the proper use of compound and dissecting microscopes.

Tentative Schedule:

Tue 8/28:	Course Introduction; Course Outline; Microscope and Material Usage
Thu 8/30:	Introduction to Plant Diseases Chapters 2 and 3
Tue 9/4:	Disease Hunt and Diagnostic Basics (Lab Report #1)

Thu 9/6:	Fungal Diseases (Quiz #1) Chapter 11
Tue 9/11:	Diagnosing Fungal Diseases Using Sectioning and PDA (Lab Report #2)
Thu 9/13:	Rust Diseases (Quiz #2) Chapter 11
Tue 9/18:	Diagnosing Rust Diseases Using Sectioning and PDA (Lab Report #3)
Thu 9/20:	Bacterial Diseases (Quiz #3) Chapter 12
Tue 9/25:	Diagnosing Bacterial Diseases Using Streaming and NA (Lab Report #4)
Thu 9/27:	Viral Diseases (Quiz #4) Chapter 14
Tue 10/2:	Diagnosing Viral Diseases Using Inoculations (Lab Report #5)
Thu 10/4:	Environmental/Non-Infectious Diseases (Quiz #5) Chapters 7, 10, and 13
Tue 10/9:	Diagnosing Environmental/Non-Infectious Diseases (Lab Report #6)
Thu 10/11:	Common Diseases of Landscape Plants (Quiz #6) Chapter 9
Tue 10/16:	Diagnosing Diseases of Landscape Plants (Lab Report #7)
Thu 10/18:	Midterm Exam No Readings
Tue 10/23:	Guest Presentation (Lab Report #8)
Thu 10/25:	Common Turf Grass Diseases No Readings
Tue 10/30:	Diagnosing Turf Grass Diseases (Lab Report #9)
Thu 11/01:	Common Diseases of Food Products (Quiz #7) No Readings

Tue 11/6:	Fruit Bowl (Lab Report #10)
Thu 11/8:	Soil Borne Pathogens (Quiz #8) Chapters 15 and 16
Tue 11/13:	Lab Practical
Thu 11/15:	Insects: Vectoring Disease and Causing “Disease Like” Damage (Quiz #9) No Readings
Tue 11/20:	Insect Identification and Greenhouse IPM to Manage Plant Disease (Lab Report #11)
Thur 11/22:	Happy Thanksgiving No Readings
Tue 11/27:	Guest Presentation (Lab Report #12)
Thu 11/29:	History of Plant Diseases (Quiz #10) Chapter 1
Tue 12/04:	Presentation of Projects (Lab Report #13)
Thu 12/06:	Presentation of Projects (Quiz #11) No Readings
Tue 12/11:	Final Exam Review Session No Readings

Final Exam TBA