Field Survey PLPA 7080 – 3 credits

Summer 2012 Syllabus

Instructors: Dr. Kathy S. Lawrence Dr. Joe Kloepper

209 Life Science 209 Life Science

844-1956 844-1950

<u>lawrekk@auburn.edu</u> <u>kloepjw@auburn.edu</u>

OBJECTIVES

This course focuses on the practical aspects of plant disease. Our main objective of the course is to give students "real world" experiences with plant diseases and plant growth in agricultural. On site visits via field trips to producers fields, greenhouses, and markets along with onsite visits with the agriculture industry corporations gives the students an understanding of the agriculture business as it relates to plant pathology from multiple perspectives.

COURSE DESCRIPTION

There will be no traditional classroom lectures. Instead, the learning will take place primarily in the field. We will take one trip:

Trip 1: July 8 - 14, to Homestead, FL.

At each location visited, there will be in-field discussions with producers and researchers on the general topic of optimizing production. Disease management is one part of the challenge faced by producers and industry. However, as we will see during the field tours, disease management has to be considered together with fertility, presence or absence of cover crops, cropping history, and problems with weeds and insects.

Students are required to participate by asking questions during these discussions. It will not be possible to get an A in the course without actively participating by asking questions during the field visits.

ACADEMIC HONESTY:

All Auburn University students are bound by The Auburn University Oath of Honor:

"In Accordance with those virtues of Honesty and Truthfulness set forth in the Auburn Creed, I, as a student and fellow member of the Auburn Family, do hereby pledge that **all work is my own, achieved through personal merit and without any unauthorized aid.** In the promotion of integrity, and for the betterment of Auburn, I give honor to this, my

oath and obligation."

This oath basically means that plagiarism will not be tolerated. Further, the instructor is **required** to report any suspected plagiarism to the Provost's office, which will conduct an investigation. Conviction of plagiarism is grounds for dismissal from Auburn University.

GRADING

Class grades will be assigned as a percentage of total possible points (90% = A).

Total points = 100:

Participation in discussions on field trips 50 Field trip report 50

Field trip report

Each student will prepare a comprehensive report from the field trip. The report must be a minimum of 8 and a maximum of 10 pages, double-spaced, Times Roman font 12, NOT including photos.

Organize the report into sections by locations visited on the field trip.

For each location (each stop), list the following information:

- Crops seen.
- Diseases seen: name of disease, pathogen, symptoms, comments about how disease is spread, management options. **Note:** Students are responsible for getting this information, so you will need to ask questions as you are shown diseases. For example, if the presenter showing us around shows a disease without talking about management options, students must ask or look it up later and add to the student report.
- Student comments on the perspective of the institution visited. For example, "Stop no. 2 was at the agricultural research center. The institute conducts applied research on diseases of crops located in south Florida."
- What you found most interesting about the specific location.

You will obtain some of this information during discussions on the trip. However, you will need to supplement the information from the trip with other sources to provide an adequate discussion of the career options available in agriculture. Photographs should be inserted into the report, especially photographs of all pathogens and pest symptoms observed.

Oral report

Each student will prepare a brief oral report for presentation after the field trip. The subject of the report will be one disease of one crop seen on the trip. Prepare a 10 minute presentation (with handouts of the slides) in which you address the following points:

- Host range
- Agronomic aspects of host that relate to disease
- Pathogen
- Pathogen ecology (survival, infection, dissemination)

- Management options for disease (cultural, biological, chemical)
- Regulatory or social issues related to disease (if appropriate).

KEY DATES:

Trip 1: July 8-14, 2012.

Oral presentations: July 24, 9 AM.