PLPA 8910  TEACHING PRACTICUM

1) **Credit:** 1 semester hours (Laboratory: W 1:00-3:00 pm)

**Prerequisites:** Departmental approval

**Instructor:** Dr. Kathy Lawrence  
Office: 209 Life Science Building  
Phone: 844-1956 (office)  
Email: lawrekk@auburn.edu  
Office hours: MWF 8:00-10:00 or by appointment

2) **Textbook** – none required

3) **Course Description:** PLPA 8910 TEACHING PRACTICUM (1). LEC. 1. F, SP  
The teaching practicum will address the practical and theoretical issues of laboratory learning and facilitating the skills of pedagogy. This course is required of all Ph.D. candidates.

4) **Course Objectives:** The teaching practicum is an opportunity to practice theories and approaches to facilitating learning in classroom and laboratory settings. Graduate students will have the opportunity to develop, organize, and prepare laboratory demonstrations and experiments utilizing multimedia tools and practice oral communications skills. By assisting university professors, students will observe classroom dynamics and refine and expand their teaching skills.

5) **Course Content:**

**Outline:**

Class session will vary based on the class assigned to the graduate student. Students will spend variable amounts of time preparing for oral presentations and laboratories utilizing approximately two hours.

I. Organizational meeting to schedule presentations and discuss responsibilities.

II. Prepare class or lab materials following the lab schedule, post lab outlines on the university web site blackboard, collect and prepare all materials needed for the lab class meeting.

III. Conduct weekly labs throughout the semester. Grade weekly assignments and post grades on the current university web site blackboard. All assignments will be graded and posted in a timely fashion (within 7 days).

IV. Compile all weekly grades, lab reports, lab practical exams, and final exam. Turn the grades into the professor.

V. Written evaluations and suggestions will be completed by the faculty and the student to review the class or lab and suggest changes for improvement. This is a learning experience and these comments are to help improve future presentations.
6) Course Requirements / Evaluation:

Grading System:
This is an SU graded course. Students are expected to meet all professional responsibilities including attendance, punctuality, appearance and professional relationships. Principle criteria for evaluation include:
1) Quality of class or lab materials prepared,
2) Timeliness of the assignment grading and posting,
3) Student evaluations,
4) Attendance is required for all class or lab meetings.
Students who miss a lab meeting without a University-approved excuse will receive an unsatisfactory U grade.

7) Course Policy Statements:

Class: Two hour of laboratory or lecture presentation per week. Class participation is required.

Late Submissions: It is the students’ responsibility to prepare all laboratory materials and upload them on the current university web site. Students will also be responsible for grading the weekly lab assignments and posting grades. If a serious situation arises and the student anticipates he/she will not be able to meet a deadline, it should be discussed with the professor before the due date.

Learners with Disabilities:

Auburn University is committed to providing accommodations and services to students with documented disabilities. Any learner with a qualified disability which requires accommodations should contact The Program for Students with Disabilities, 1244 Haley Center, Auburn University, AL 36849, 334-844-2096 PH, 334-844-2099 FAX. More information is available on their website at www.auburn.edu/disability. The office will fax or mail the required forms to learners to apply for services. Learners who have questions to participate in this course should contact the above office in advance to ensure proper accommodations.

Plagiarism and Academic Dishonesty:

Plagiarism is the act of presenting directly or indirectly someone else’s work as your own. Plagiarism is a major type of academic dishonesty and will not be tolerated. Similarly cheating on tests in any way, falsifying bibliographies, fraudulent quotes, and similar practices are intolercable forms of academic dishonesty. The University’s policy for academic misconduct in the Student Code of Conduct will be followed for this course (Tiger Club, pp. 83 and 92). Please contact the instructor for any questions regarding its contents.

8) Justification for Graduate Credit:
Topics to be discussed require background knowledge at the advance graduate level. Students must be able to acquire, analyze, present and discuss complex data and scientific concepts in an academically-rigorous setting.

PLPA 3000 Laboratory Schedule

Week 1  
Lab 1 Use and Care of the Light Microscope on the laboratory  
Sterile Technique - Isolation of Fungi and Bacteria  
Cover guidelines for weekly quizzes

Week 2  
Lab 2 Recognition and Terminology of Disease Symptoms and Signs  
Scavenger hunt for plant disease symptoms  
Set up Koch’s Postulates

Week 3  
Lab 3 Plant Disease Ratings  
Practice various plant disease ratings of crops, ornamentals, and grasses  
Continue Koch’s Postulates

Week 4  
Lab 4 Damping off of Seeds and Seedlings  
Set up experiments testing soil borne pathogens effect on seed germination  
Continue Koch’s Postulates

Week 5  
Lab 5 Characteristics and Structures of Fungi  
Observations of fungal fruiting structures and some fungal identification  
Continue Koch’s Postulates

Week 6  
Lab 6 Dissemination of fungal spores and bacterial cells by wind and water  
Damping off of Seeds and Seedlings completed  
Complete Koch’s Postulates  
Review for mid term

Week 7  
Lab 7 Lab practical

Week 8  
Lab 8 Basidiomycetes – Rusts and Smuts  
Observations of rust and smut diseases, spore germination and infection.

Koch’s Postulates - Report due

Week 9  
Lab 9 Bacterial Pathogens and Crown Gall  
Signs and symptoms of bacterial diseases

Week 10  
Spring Break

Week 11  
Lab 10 Mechanical Transmission of Plant Viral Diseases  
Signs and symptoms of viral diseases

Week 12  
Lab 11 Study of Plant Parasitic Nematodes  
Signs and symptoms of nematode diseases

Week 13  
Lab 12 Abiotic Diseases
Set up fertilizer and herbicide drift tests on monocots and dicots.

Week 14  **Lab 13 Forestry Lab**  
Forestry diseases common in the southeast

Week 15  **Lab 14 Diagnosis Lab field trip**  
Tour the Auburn University plant diagnostic lab.

Week 16  **Lab 15 Disease Identification Practical**