PLANT PATHOLOGY (PPATH)

PPATH 502: Plant Disease Diagnosis
3 Credits
Field and laboratory techniques used in diagnosing plant diseases caused by various types of pathogens with emphasis on fungi.
Prerequisite: PPATH401

PPATH 505: Fundamentals of Phytopathology
3 Credits
An in-depth tutorial of the fundamental theories and concepts of plant pathology. PPATH 505 Fundamentals of Phytopathology (2) Using the primary literature of the discipline, students will explore, in-depth, the knowledge base of plant pathology. Students will write a 3-5 page paper each week summarizing the major points of the topic covered in the primary literature assigned as related to 4 pathogens/diseases chosen by each student from an approved list. Students will also answer, in writing, 1-2 specific questions posed by the instructor each week. These writings constitute 90% of the grade. 5% of the grade is based upon a written final exam and 5% on oral participation in class.

PPATH 522: Professional Development & Ethics in Plant Pathology
1 Credits
Graduate students will develop key professional skills and ethics through a combination of lectures, discussions, and assignments. PPATH 522 Professional Development & Ethics in Plant Pathology (1) This course is designed to help graduate students acquire key professional skill and ethics through a combination of lectures, case study discussions on various ethics and professionalism issues, dialogs with invited guests about their professional experience, and mock exercises of paper and proposal reviews. Topics to be covered include: (a) the process and ethics of publishing, (b) how peer review of papers and grant proposals works, (c) plagiarism, (d) scientific misconduct, (e) oral and poster presentation skill, and (f) successful strategies in grant proposal writing and proposal review.

PPATH 533: Molecular Genetics of Plant-Pathogen Interactions
3 Credits
In depth discussion/review of the primary literature on the mechanisms of plant-pathogen interactions at the molecular and cellular levels. PPATH 533 Molecular Genetics of Plant-Pathogen Interactions (3) The main objective of this 3-credit course is to help students gain (a) firsthand knowledge of various techniques used in studying the molecular basis of plant-pathogen interactions and (b) knowledge of the current concepts and theories on the nature and mechanisms of the plant-pathogen interactions. In addition, this course will help students develop an ability to integrate and synthesize various areas of knowledge in solving plant health related problems. This course will serve the needs of students in Plant Pathology and other departments/programs who require an in-depth understanding of the molecular basis of plant-pathogen interactions for their program of study. This course will be offered in fall of even numbered years, and its expected enrollment is 8-10. Grading will be based on class participation, paper presentations, assignments, and a mid-term exam.

Prerequisite: 3 credits of mycology and introductory genetics
PPATH 590: Colloquium
1-3 Credits/Maximum of 3
Continuing seminars which consist of a series of individual lectures by faculty, students, or outside speakers.

PPATH 596: Individual Studies
1-9 Credits/Maximum of 9
Creative projects, including nonthesis research, which are supervised on an individual basis and which fall outside the scope of formal courses.

PPATH 597: Special Topics
1-9 Credits/Maximum of 9
Formal courses given on a topical or special interest subject which may be offered infrequently; several different topics may be taught in one year or term.

PPATH 600: Thesis Research
1-15 Credits/Maximum of 999
No description.

PPATH 601: Ph.D. Dissertation Full-Time
0 Credits/Maximum of 999
No description.

PPATH 602: Supervised Experience in College Teaching
1-3 Credits/Maximum of 6
Supervised preparation and presentation of materials in lectures and laboratories, preparation and supervision of exams and student consultation and evaluation.

PPATH 610: Thesis Research Off Campus
1-15 Credits/Maximum of 999
No description.

PPATH 611: Ph.D. Dissertation Part-Time
0 Credits/Maximum of 999
No description.

PPATH 802: Plant Protection: Responding to Introductions of Threatening Pests and Pathogens
3 Credits
This course provides knowledge of plant biosecurity, plant disease, regulations, and technologies using case study examples.

Cross-listed with: AGBIO 802

PPATH 853: Interpreting Turfgrass Science Literature
3 Credits
Introduction to turfgrass research publications, interpretation of the data, and discussion of the significance of the results. PPATH (TURF)