PLANT PATHOLOGY (PLPA)

PLPA Class Schedule (https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/PLPA)

Courses

PLPA 204  Introductory Plant Pathology  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/204)
Concepts relating to causal agents of representative plant diseases, symptoms and diagnosis, modes of infection and spread, effects of environment on disease development, and methods of control. This course satisfies the General Education Criteria for: Advanced Composition
Nat Sci Tech - Life Sciences

PLPA 295  Undergrad Research or Thesis  credit: 1 to 4 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/295)
Individual research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated in the same or separate semesters. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Cumulative GPA of 2.5 or above at the time the activity is arranged and consent of instructor.

PLPA 401  Plant Pathogenic Fungi  credit: 4 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/401)
Principles of the biology, ecology and pathogenesis of fungi that cause plant diseases; morphology, classification, and history of these pathogens. The course includes both lecture and laboratory components. 4 undergraduate hours. 4 graduate hours. Offered in alternate years. Prerequisite: One year of biology or plant biology; and plant and animal genetics; and an introductory plant pathology course; or consent of instructor.

PLPA 402  Phytoparasitic Nematodes  credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/402)
Study of plant-pathogenic nematodes with emphasis on economically important groups; nematode morphology, identification, classification, development biology, ecology, and host-parasite relationships; interaction with fungi, bacteria and viruses in plant disease development, experimental and diagnostic techniques; and symptomology and control. 2 undergraduate hours. 2 graduate hours. Prerequisite: An introductory course in plant pathology and an introductory course in zoology, or consent of instructor.

PLPA 404  Plant Virology  credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/404)
Current knowledge of viruses and the diseases they cause in plants studied in lectures, discussions and laboratories. Topics include virus structure, replication, expression, taxonomy and transmission and viral disease detection, diagnosis, epidemiology and management. 2 undergraduate hours. 2 graduate hours. Offered in alternate years. Prerequisite: An introductory course in plant pathology and an introductory course in genetics, or consent of instructor.

PLPA 405  Plant Disease Diagnosis & Mgmt  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/405)
Field and laboratory techniques in plant disease diagnosis and appraisal; identification of diseases of small grains, turf, corn, soybeans, forage crops, vegetables, fruit, forest and shade trees, and ornamentals, both on field trips and in laboratory exercises. Includes fundamentals of disease management. 3 undergraduate hours. 3 graduate hours. Prerequisite: PLPA 204 or equivalent.

PLPA 406  Phytobacteriology  credit: 2 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/406)
Provides up-to-date coverage of prokaryotes that cause plant diseases. Lectures, discussions, and laboratories cover taxonomy, molecular biology, etiology, detection and identification, epidemiology and management of major plant pathogenic prokaryotes. 2 undergraduate hours. 2 graduate hours. Offered in alternate years. Prerequisite: An introductory course in Plant Pathology and Microbiology, or consent of instructor.

PLPA 407  Diseases of Field Crops  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/407)
Studies the symptoms of major field crop diseases, life histories of causal organisms, and methods of control. Lecture and laboratory. Same as CPSC 407. 3 undergraduate hours. 3 graduate hours. Prerequisite: PLPA 204 or PLPA 401.

PLPA 509  Mol Bio of Microbe-Plant Inter  credit: 3 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/509)
Detailed analysis of the microbe-plant interaction at the molecular level. Covers commensal, symbiotic, and pathogenic interactions from viewpoint of both plant and microbe. Emphasizes microbial and plant genes involved in the interactions, their organization, regulation of expression and the nature and function of the encoded gene products. Same as MCB 511. Offered in alternate years. Prerequisite: MCB 421 or PLPA 204 or equivalents.

PLPA 599  Thesis Research  credit: 0 to 16 Hours. (https://courses.illinois.edu/schedule/terms/PLPA/599)
Individual study and basic and/or applied research related to plant disease; required of all students working toward the Master of Science or Doctor of Philosophy in Plant Pathology. 0 to 16 graduate hours. No professional credit. Approved for S/U grading only. May be repeated to a maximum of 16 hours if topics vary.