PLANT PATHOLOGY PLP

Department of Plant, Soil and Microbial Sciences
College of Agriculture and Natural Resources

104 Applied Plant Pathology for Ornamentals and Turf
   Fall of odd years. 3(2-2) Fall: W. K. Kellogg Biological Station and All CHM communities and Grand Rapids. R: Open to agricultural technology students in the College of Agriculture and Natural Resources. Diseases of woody ornamentals and turf grasses.

105 Fundamentals of Applied Plant Pathology
   Spring. 2(2-2) R: Open to students in the Institute of Agricultural Technology. Not open to students with credit in PLP 405. Diseases of major agronomic and horticultural plants. Disease management. Offered first ten weeks of the semester.

200 Plant Diseases and Their Pathogens
   Fall of even years. 3(2-2) Fall: All CHM communities and Traverse City. R: Open to agricultural technology students in the College of Agriculture and Natural Resources. Plant diseases. Biology of pathogens that cause disease. Disease management, with focus on Northern Michigan.

266 Turf Pathology
   Fall. 3(2-2) SA: CSS 362, PLP 366 Turf pathogen and turf diseases. Cultural, biological and chemical methods for turf disease management.

402 Biology of Fungi
   Fall of even years. 4(2-4) Interdepartmental with Plant Biology. Administered by Plant Biology. P: BS 162 or BS 161 or PLB 105 or LB 144 or LB 145 or BS 182H or BS 181H SA: BOT 402 Characteristics, habitats, and diversity of major groups of fungi. Ecologic and economic importance of fungi.

405 Plant Pathology
   Spring. 3(2-3) P: ((BS 161 and BS 162) and completion of Tier I writing requirement) or ((PLB 105 and PLB 106) and completion of Tier I writing requirement) or ((LB 144 and LB 145) and completion of Tier I writing requirement) SA: BOT 405 Plant diseases and the organisms that cause them. Principles of disease management including application of chemical and biological control, biological control, and genetic engineering.

407 Diseases and Insects of Forest and Shade Trees
   Spring. 4(3-3) Interdepartmental with Entomology and Forestry and Plant Biology. Administered by Plant Pathology. P: (PLB 105 or BS 162 or LB 144) and Completion of Tier I Writing Requirement SA: BOT 407 Diseases, insects, and environmental problems affecting trees in forests, parks, suburbs, and nurseries. Methods of control.

490 Independent Study
   Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Independent study of plant pathology on a laboratory, field or library research program of special interest to the student.

491 Selected Topics in Plant Pathology
   Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: PLP 405 or PLP 407 Selected topics in plant pathology of current interest and importance.

492 Seminar
   Spring. 2(2-0) P: (PLP 406) and completion of Tier I writing requirement R: (PLP 405) Capstone course. Experience in scientific writing, oral presentations, professional preparation, and current developments in plant pathology.

493 Professional Internship in Plant Pathology
   Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. A student may earn a maximum of 6 credits for any or all of these courses: ABM 493, ANR 493, ANS 493, CMP 493, CSS 493, CSUS 493, EEP 493, FIM 493, FSC 493, FW 493, HRT 493, PKG 493, and PLP 493. R: Approval of department; application required. Supervised professional experiences in agencies and businesses related to plant pathology.

494 Molecular and Biochemical Plant Pathology
   Spring of even years. 3(2-0) R: BMB 462 and ZOL 341 and PLB 415 SA: BOT 881 Biochemical and molecular bases of host-pathogen interactions. Mechanisms of pathogenicity and the nature of disease resistance.

495 Prokaryotic Diseases of Plants
   Fall of even years. 3(3-0) Interdepartmental with Plant Biology. Administered by Plant Pathology. R: PLP 405 SA: BOT 884 Prokaryotic genera associated with plant diseases. Genetics and host-pathogen interactions. Prokaryotic disease control strategies.

496 Plant Diseases in the Field
   Summer of odd years. 2(1-3) R: Open to graduate students. SA: BOT 885 Diagnosis of plant diseases and disorders in a field setting. Field trips and independent study required.

497 Independent Study
   Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students. Individual study in laboratory, field or library research in plant pathology.

498 Undergraduate Research
   Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: Completion of Tier I writing requirement. R: Approval of department. Faculty supervised laboratory. Field research in plant pathology.

500 Principles in Plant Pathology
   Fall. 2(2-0) RB: (PLP 405) or equivalent course Biodiversity of plant pathogens, molecular plant microbe interactions, microbial ecology, epidemiology, and population genetics of plant pathogens.

582 Epidemiology of Plant Diseases
   Spring of odd years. 3(3-0) SA: BOT 812 Populations of plant pathogens within populations of plant hosts as affected by the environment and humans.

583 Plant Reproductive Biology and Polyploidy
   Spring of odd years. 1(3-0) Interdepartmental with Crop and Soil Sciences and Forestry and Horticulture and Plant Biology. Administered by Horticulture. RB: Introductory Genetics and Plant Biology Genetic processes underlying variations in plant reproductive biology and polyploidy. Utilization of these characteristics in plant breeding.

584 Advanced Mycology

894 Seminar in Plant Pathology
   Fall, Spring. 1(1-0) A student may earn a maximum of 6 credits in all enrollments for this course. Review, organization, analysis and oral presentation of research.

899 Master's Thesis Research
   Fall, Spring. 1 to 12 credits. A student may earn a maximum of 99 credits in all enrollments for this course. Master's thesis research.

999 Doctoral Dissertation Research
   Fall, Spring. 1 to 24 credits. A student may earn a maximum of 36 credits in all enrollments for this course. Doctoral dissertation research.