PLANT HEALTH • PLHL

2050 Introduction to Pest Management (4) S Prereq.: BIOL 1201, 1208 and 1402 or equivalent. 3 hrs. lecture; 3 hrs. lab. Also offered as ENTM 2050. Recognition and classification of major pests; insects, pathogens, weeds, vertebrates; anatomy and morphology, life cycles, economic importance, and control measures.

3000 Pest Management Internship (3) Su Prereq.: written consent of advisor. May be taken for a max. of 6 sem. hrs. credit. Also offered as ENTM 3000. Work experience in an agricultural or urban pest management industry or in a pest management research area culminating in acceptable written reports.

3002 Pest Management Seminar (1) F Prereq.: PLHL 3000 or ENTM 3000. Also offered as ENTM 3002. Review and discussion of internship experiences including topics in agricultural pest management and urban entomology; development of professional skills.

3060 Introductory Plant Physiology (4) F Prereq.: BIOL 1202 and 1209; CHEM 2060, 2261, or 2461. 3 hrs. lecture; 3 hrs. lab. Also offered as BIOL 3060. Life processes of plants.

3900 Undergraduate Research in Plant Pathology (1-3) V Prereq.: PLHL 4000 or equivalent and consent of instructor. May not be repeated for credit. Research experience for students contemplating graduate study in plant pathology.

3960 Undergraduate Research in Crop Physiology and Weed Science (1-3) V Prereq.: PLHL 3060 or either BIOL 2051, 2052, and 2053. Also offered as BIOL 3960. Research experience for students contemplating graduate study in crop physiology or weed science.

4000 General Plant Pathology (3) S Prereq.: BIOL 1201, 1208 and 1402; or equivalent. 2 hrs. lecture; 3 hrs. lab. Nature and cause of disease in plants; relation of environment and host-parasite interactions to development of disease symptoms caused by plant pathogenic fungi, bacteria, viruses, mycoplasms, and nematodes; biotic causes of disease; methods of disease control; diseases affecting Louisiana crops and ornamentals.

4001 Plant Disease Management and Control (3) F Prereq.: PLHL 4000 and either CHEM 2060 or 2261. 2 hrs. lecture; 2 hrs. demonstration/lab. Plant disease management and control using cultural practices, disease resistance, biological control, legislation, therapy, pesticides; identity, properties, chemistry, mode of action, toxicity, and application of fungicides, bactericides, and nematicides; evaluation of chemicals for plant disease control.

4002 Special Topics in Agricultural Pest Management (1-3) V Prereq.: consent of instructor. May be taken for a max. of 6 sem. hrs. of credit when topics vary. Lab/field trip may be required. Subjects not covered in other weed science or plant pathology courses.

4014 Diseases of Economic Crops (4) F Prereq.: PLHL 4000 or equivalent; 3 hrs. lecture; 3 hrs. lab. Diseases affecting economically important crops; their causal agents, disease cycles, symptoms, distribution, economic importance, and control.

4018 Forest Insects and Diseases (4) F See ENTM 4018.

4054 Introductory Mycology (4) 3 hrs. lecture; 3 hrs. lab. Same as BIOL 4054.

4444 Seed Physiology (3) S Prereq.: BIOL 1201, 1208 and 1402 and either CHEM 2060 or 2261. BIOL 3060 recommended. Also offered as BIOL 4444. Introduction to the life processes of seeds: their development, germination, dormancy, ecology, vigor, and viability.

7000 Phytopathology (4) S Prereq.: PLHL 4000. 2 hrs. lecture; 4 hrs. lab. Taxonomy, identification, and control of plant parasitic nematodes.

7003 Plant Disease Diagnosis (3) Su-E Prereq.: consent of instructor. 3 hrs. lecture; 6 hrs. lab. Primarily for Ph.D. students majoring or minoring in plant pathology or M.S. students majoring in plant pathology. Practicum in plant disease diagnosis with field and clinic experience.

7010 Plant Molecular Biology (3) V Prereq.: BIOL 3060, 4093 and 4094; or equivalent. Also offered as BIOL 7010. Molecular biology, biochemistry and genetics of higher plants and plant-associated microorganisms; genome organization and structure in nuclei, chloroplasts, and mitochondria; structure and expression of plant genes under control of developmental and environmental signals; plant interactions with pathogenic and symbiotic microorganisms.

7011 Phytochemistry (3) S-O Prereq.: PLHL 4000, BIOL 2051. 3 hrs. lecture; 3 hrs. lab. Taxonomy, biology, mechanisms of pathogenesis; control of prophylactic plant pathogens.

7014 Plant Stress Physiology (3) S-O Prereq.: PLHL 3060 or equivalent. Also offered as BIOL 7014. Plant responses to environmental stresses examined at tissue, cellular, biochemical, and whole-plant levels.

7032 Advanced Mycology: Ascomycetes and Deuteromycetes (4) S-O Prereq.: PLHL 4054 or equivalent. 3 hrs. lecture; 3 hrs. lab. Also offered as BIOL 7032. Taxonomy, biology and ecology of ascomycetes and deuteromycetes; collection, isolation, and identification of fungi.

7040 Plant Virology (4) F-E Prereq.: PLHL 4000 and PLHL 7063; or equivalent. 2 hrs. lecture; 4 hrs. lab. Viruses as causal agents of plant diseases; biological, chemical, and physiological properties of plant viruses; methods of transmission; host-virus and vector-virus relationship.

7051 Advanced Topics in Plant Pathology (1-4) V Prereq.: consent of instructor. May be taken for a max. of 8 sem. hrs. of credit.

7052 Seminar (1) F-S May be taken for a max. of 3 hrs. of credit for each graduate degree. Topics announced prior to registration.

7056 Advanced Mycology: Lower Fungi (4) Prereq.: BIOL 4054 or equivalent. 3 hrs. lecture; 3 hrs. lab. Same as BIOL 7056.

7061 Plant Growth and Development (3) F Prereq.: BIOL 3060 or PLHL 3060 and BIOL 4093; or equivalent. Also offered as BIOL 7061. Effects of naturally occurring growth substances and environmental conditions on plant growth.

7063 Plant Metabolism (3) S Prereq.: PLHL 3060 or equivalent. Also offered as BIOL 7063. Major metabolic systems of plants and their control.

7065 Transport Processes in Plants (3) S Prereq.: BIOL 3060. Same as BIOL 7065.

7067 Selected Topics in Plant Physiology (2) F Prereq.: consent of instructor. May be repeated for credit. Same as BIOL 7067. Mineral nutrition, metabolism, growth and development, and herbicides.

7068 Current Literature in Plant Physiology (1) F-S May be taken twice for credit in a master’s program and twice in a doctoral program. Also offered as BIOL 7068. Critical analysis of recent and classical papers in the field.

7080 Host-Parasite Interaction and Disease Resistance (3) S-E Prereq.: PLHL 4000 and PLHL 7063; or equivalent. 2 hrs. lecture; 2 hrs. lab. Genetics, physiology, and biochemistry of disease development and disease resistance in plants; mechanisms of pathogenicity and infectivity, tumorigenesis, metabolic consequences of infection, nature of disease resistance, and parasitism.

7082 Soilborne Plant Pathogens (3) F Prereq.: PLHL 4000 or equivalent. Physiology, ecology, and pathology of soilborne plant pathogens; control strategies including cultural, biological, and genetic disease suppressive soils.

7083 Epidemiology and Crop Loss Assessment (3) S-E Prereq.: PLHL 4000 and 4001 or equivalent. Interactions between pathogen and host populations, and the environment; measurement and prediction of disease spread and increase; disease management strategies; techniques to assess losses due to plant disease.

8000 Thesis Research (1-12 per sem.) “S”/“U” grading.

8900 Special Research Problems (1-5) Prereq.: consent of instructor. May be taken for a max. of 9 sem. hrs. credit. Faculty supervised, independent research other than thesis or dissertation.

9000 Dissertation Research (1-12 per sem.) “S”/“U” grading.