PLANT PATHOLOGY  PLP

Department of Plant Pathology
College of Agriculture and Natural Resources

101 Current Issues and Frontiers in Plant Pathology
Fall. 1(1-0)
Basic principles of plant disease and plant pathogens. Current topics and future opportunities in the discipline of plant pathology.

105 Fundamentals of Applied Plant Pathology
Spring. 2(1-2) R: Open only to students in the Institute of Agricultural Technology. SA: CSS 055 Not open to students with credit in CSS 055 or PLP 405.
Diseases of major agronomic and horticultural plants. Disease management. Offered first ten weeks of the semester.

205 Pests, Society and Environment

362 Management of Turfgrass Pests
Fall. 4(3-2) Interdepartmental with Crop and Soil Sciences; Entomology. Administered by Department of Crop and Soil Sciences. P.M. (CSS 232)
Chemical, biological, and cultural methods of managing weeds, diseases, and insect pests of turfgrass. Environmental considerations in pest management.

402 Biology of Fungi
Fall. 3(2-3) Interdepartmental with Plant Biology. Administered by Department of Plant Biology. P.M: (BS 110 or BS 111 or PLB 105 or LBS 145 or LBS 148H or LBS 149H) SA: BOT 402
Major groups of fungi: characteristics, habitats, and diversity. Significance of fungi in nature and their economic importance.

405 Plant Pathology
Spring. 3(2-1) P.M: (BS 110 and BS 111) or (PLB 105 and PLB 106) or (LBS 144 and LBS 145) or (LBS 148H and LBS 149H) and completion of Tier I writing requirement. SA: BOT 405 Not open to students with credit in BOT 407.
Plant diseases and the organisms that cause them. Principles of disease management including application of chemicals, plant breeding, biological control, and genetic engineering.

407 Diseases and Insects of Forest and Shade Trees
Spring. 4(3-3) Interdepartmental with Entomology; Plant Biology. P.M: (PLB 105 or BS 110 or LBS 144 or LBS 148H) and (PLB 218 or FOR 204 or HRT 211) 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.
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821 Crop Evolution
Spring of odd years. 1 credit. Interdepartmental with Horticulture; Crop and Soil Sciences; Forestry; Plant Biology. Administered by Department of Horticulture. RB: Introduction to Genetics and Plant Biology. Cultural and biological aspects of the evolution of domestic plants.

822 Historical Geography of Crop Plants
Spring of odd years. 1 credit. Interdepartmental with Horticulture; Crop and Soil Sciences; Forestry; Plant Biology. Administered by Department of Horticulture. RB: Introduction to Genetics and Plant Biology. Development and spread of the major crop species.

847 Advanced Mycology
Spring of even years. 4(2-4) Interdepartmental with Plant Biology. RB: (BOT 402) SA: BOT 847. Systematics, identification, physiology, genetics, and molecular biology of plant pathogenic fungi.

870 Nematode Management in Crop Systems
Summer of even years. 3(2-3) Interdepartmental with Entomology. Administered by Department of Entomology. RB: (PLP 405) SA: BOT 870. Biology, host-parasite relationships and management by farming and cropping systems of selected nematode diseases of economic plants.

880 Plant Virology
Fall of odd years. 4(2-4) RB: (BMB 462 and BOT 810) SA: BOT 880. Biology and molecular aspects of viruses causing plant disease.

881 Molecular and Biochemical Plant Pathology
Fall of even years. 3(2-2) RB: (BMB 462 and ZOL 341 and PLP 810) and (BOT 414 or BOT 415) SA: BOT 881. Biochemical and molecular bases of host-pathogen interactions. Mechanisms of pathogenicity and the nature of disease resistance.

884 Prokaryotic Diseases of Plants
Fall of even years. 4(2-4) RB: (BOT 810) SA: BOT 884. Prokaryotic genera associated with plant diseases. Identification, physiology, and genetics. Laboratory techniques.

885 Plant Diseases in the Field
Summer of odd years. 2(1-3) RB: (PLP 810) R: Open only to graduate students. SA: BOT 885. Diagnosis of plant diseases and disorders in a field setting. Field trips and independent study required.

890 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 only to graduate students. Individual study in laboratory, field or library research in plant pathology.

893 Selected Topics
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Current topics in plant pathology.

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. Summer. 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. Summer. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course. Doctoral dissertation research.

POlITICAL SCIENCE PLS

Department of Political Science
College of Social Science

100 Introduction to American National Government
Fall, Spring, Summer. 3(3-0) The policymaking process in national government, with emphasis on political participation, the presidency, Congress, Supreme Court, bureaucracy, and civil rights and civil liberties.

140 Government and Politics of the World
Fall, Spring, Summer. 3(3-0) Comparative analysis of political systems in first, second, and third-world countries. Alternative methodologies for comparative cross-cultural analyses of political systems.

160 Introduction to International Relations
Fall, Spring, Summer. 3(3-0) Not open to students with credit in MC 220 or MC 221. Dynamics of conflict and cooperation. Processes of foreign policy decision making. Major international economic issues. Basic future trends. Primary analytical approaches for studying world politics.

170 Introduction to Political Philosophy
Fall, Spring, Summer. 3(3-0) Basic questions of political philosophy as considered from ancient to modern times. Major emphasis on assembly theory, defense, and radical critiques of modern liberal democracy.

200 Introduction to Political Science
Fall, Spring, Summer. 4(4-0) The science of politics. Theory construction, model building, empirical testing, and inductive inference. Examples from American, international and comparative politics.

201 Introduction to Methods of Political Analysis
Fall, Spring, Summer. 4(4-0) P:MC: (PLS 200 or MC 201). Philosophy of social science. Principles of research design, measurement, hypothesis testing, measures of association, cross tabulations, and regression analysis.

301 American State Government
Spring. 3(3-0) Structure and processes of American state government. Interstate differences. Constitutions, elections, political parties, interest groups, and intergovernmental relations. Policy focus on education, welfare, and criminal justice.

302 Urban Politics
Fall. 3(3-0) Structure and processes of American urban politics. Relationship of cities to U.S. federal system. Interstate variations. Policy focus on public education, crime, social welfare, and economic development.

304 Minority Politics
Fall. 3(3-0) Minority groups and the political process in the United States. Civil rights movements, political organizations, legal decisions, political participation, and legislative politics.

310 Public Bureaucracy in the Policy Process
Fall, Spring. 3(3-0) Role of public bureaucracy in the U.S. Theories of administrative behavior and the impact of hierarchy on policy making. Relationships with the president, Congress, interest groups, and the public. Administrative functions, responsiveness, and ethics.

313 Public Policy Analysis
Fall, Spring, Summer. 3(3-0) Not open to students with credit in MC 444. Analysis of the structure and functions of judicial systems. Organization, administration, and politics of judicial bureaucracies. Roles of judges, juries, counsel, litigants, and interest groups in the adjudication process.

320 The American Judicial Process
Fall, Spring. 3(3-0) R: Not open to freshmen or sophomores. Analysis of the structure and functions of judicial systems. Organization, administration, and politics of judicial bureaucracies. Roles of judges, juries, counsel, litigants, and interest groups in the adjudication process.

321 American Constitutional Law
Fall, Spring. 3(3-0) R: Not open to freshmen or sophomores. U.S. Supreme Court policy making and its effect on issues of current importance, including First Amendment freedoms, due process, race relations, sex discrimination, and privacy.

322 Comparative Legal Systems
Spring, Summer. 3(3-0) Cross-national study of common law and civil law systems. Judicial review and selection of judges. Models of judicial decision-making. High court-low court relations. Role of courts in society.

324 American Legislative Process
Spring. 3(3-0) The design of Congress. Rules, structures, and procedures affecting policy making. Impact of regular elections on legislative behavior.

325 American Executive Process
Fall. 3(3-0) P:MC: (PLS 100) Role of the president in the U.S. political system. Constitutional questions, presidential selection, presidential power, interbranch relations, and presidential policy making.