# **PLANT PATHOLOGY (PLP)**

PLP 2990 (s) Directed Study (1-16 credits, max 99) Credit arranged.

PLP 4040 (s) Special Topics (1-16 credits, max 99)

Credit arranged

PLP 4110 Viruses and Virus Diseases of Plants (3 credits)

Joint-listed with PLP 5110

Nature of plant viruses, vector-virus relationships and virus diseases of plants. Additional assignments required for graduate credit. Typically Offered: Spring (Odd Years).

**Prereqs:** EPPN 1540 and EPPN 1550; or BIOL 2500 and BIOL 2550; and PLSC 1020; or Permission. Cooperative: open to WSU degree-seeking students.

## PLP 4150 Plant Pathology (3 credits)

Joint-listed with PLP 5150

Biology of diseases and disorders of crop, forest, and ornamental plants, with emphasis on plant-microbe interactions and on disease cause, development, diagnosis, and control. Three 1-hour lectures. Typically Offered: Fall

Prereqs: EPPN 1540 and EPPN 1550; or BIOL 2500; and PLSC 1020; or Permission

#### PLP 4160 Plant Pathology Lab (1 credit)

Joint-listed with PLP 5160

As a companion course to PLP 4150/5150 Plant Pathology, this laboratory course increases student knowledge about plant diseases caused by environmental factors and microorganisms. This laboratory course provides hands#on training in the identification and classification of representative plant diseases, including isolation and culturing techniques for plant pathogenic fungi, bacteria, nematodes and viruses.

Prereqs: EPPN 1540 and EPPN 1550 or BIOL 2500 and 2550; and

PLSC 1020; or Permission Coreqs: PLP 4150 and PLP 5150

PLP 4990 (s) Directed Study (1-16 credits, max 99)

Credit arranged.

PLP 5000 Master's Research and Thesis (1-16 credits, max 99)

Credit arranged

PLP 5010 (s) Seminar (1-16 credits, max 99)

PLP 5020 (s) Directed Study (1-16 credits, max 99)

PLP 5040 (s) Special Topic (1-16 credits, max 99)

Credit arranged

# PLP 5110 Viruses and Virus Diseases of Plants (3 credits)

Joint-listed with PLP 4110

Nature of plant viruses, vector-virus relationships and virus diseases of plants. Additional assignments required for graduate credit. Typically Offered: Spring (Odd Years). Cooperative: open to WSU degree-seeking students.

#### PLP 5120 Viruses and Virus Diseases of Plants Laboratory (1 credit)

As a companion course to PLP 5110, this laboratory course increases student knowledge about plant diseases caused by viruses. This laboratory course provides hands#on training in the identification and classification of viruses that infect plants and cause plant disease. One 2-hour 20-minute lab per week. Typically Offered: Spring (Odd Years).

Preregs: PLSC 1020; EPPN 1540 and 1550 or BIOL 2500 and 2550; or

Permission Coreqs: PLP 5110

### PLP 5150 Plant Pathology (3 credits)

Joint-listed with PLP 4150

Biology of diseases and disorders of crop, forest, and ornamental plants, with emphasis on plant-microbe interactions and on disease cause, development, diagnosis, and control. Three 1-hour lectures. Typically Offered: Fall.

#### PLP 5160 Plant Pathology Lab (1 credit)

Joint-listed with PLP 4160

As a companion course to PLP 4150/5150 Plant Pathology, this laboratory course increases student knowledge about plant diseases caused by environmental factors and microorganisms. This laboratory course provides hands#on training in the identification and classification of representative plant diseases, including isolation and culturing techniques for plant pathogenic fungi, bacteria, nematodes and viruses.

Coreqs: PLP 4150 and PLP 5150

#### PLP 5220 Plant Bacteriology (3 credits)

The purpose of this class is to provide current information on the biology of plant associated bacteria, including plant pathogens and beneficial microbes. Topics addressed will include bacterial morphology, taxonomy, genetics, and ecology. Diagnosis, disease management, and the molecular basis of host-pathogen interactions will be presented.

Prereqs: PLP 4150 or PLP 5150; and EPPN 1540 and EPPN 1550 or BIOL 2500 and BIOL 2550; or Permission

# PLP 5970 (s) Practicum (1-16 credits, max 99)

Credit arranged.

PLP 5980 (s) Internship (1-16 credits, max 99)

Credit arranged. **Prereqs:** Permission.

## PLP 5990 (s) Non-thesis Master's Research (1-16 credits, max 99)

Research not directly related to a thesis or dissertation.

**Preregs:** Permission

PLP 6000 (s) Doctoral Research and Dissertation (1-45 credits, max 99)

Credit arranged