Plant Pathology (PLPA)

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Plant Pathology Department Website (http://plantpathology.uark.edu)

Plant pathology is the study of interrelationships of plants with the abiotic and biotic agents that affect plant health and productivity. The goal of the discipline is to minimize the impact of plant diseases on agricultural production and human health. Scientific training within the department focuses on the nature, cause, and management of plant diseases.

Plant pathology is a graduate degree program. Undergraduate students interested in plant pathology should pursue a minor in pest management or plant pathology. See Pest Management (http://catalog.uark.edu/undergraduatecatalog/collegesandschools/dauburncollegeofagriculturefoodandlivestock/pestmanagementpmgt) for degree requirements.

Minor in Plant Pathology (PLPA-M)

A student planning to minor in plant pathology should notify the Department of Plant Pathology and consult an adviser. A minor in Plant Pathology consists of 19 hours to include the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PLPA 3004</td>
<td>Principles of Plant Pathology</td>
<td>4</td>
</tr>
<tr>
<td>PLPA 400V</td>
<td>Research</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>PLPA 4223</td>
<td>Plant Disease Control</td>
<td>3</td>
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<tr>
<td>PLPA 4304</td>
<td>Applied Plant Disease Management</td>
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<td>Select three of the following:</td>
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<tr>
<td>BIOL 4233</td>
<td>Genomics and Bioinformatics</td>
<td></td>
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<tr>
<td>BIOL 4303</td>
<td>Plant Physiology</td>
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<tr>
<td>BIOL 4353</td>
<td>Ecological Genetics/Genomics</td>
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<td>BIOL 4424</td>
<td>Mycology</td>
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<tr>
<td>BIOL 4753</td>
<td>General Virology</td>
<td></td>
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<tr>
<td>PLPA 4333</td>
<td>Biotechnology in Agriculture</td>
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</tbody>
</table>

Total Hours 19

Courses

PLPA 3004. Principles of Plant Pathology. 4 Hours.
This course is cross-listed with BIOL 3004.

PLPA 400V. Research. 1-6 Hour.
Original investigations of assigned problems in plant pathology. Prerequisite: PLPA 3004.

PLPA 4223. Plant Disease Control. 3 Hours.
Principles, methods and mechanics of plant disease control. Emphasis is given to the integration of control measures and epidemiology of plant diseases. Lecture 3 hours per week. Prerequisite: PLPA 3004.
This course is cross-listed with BIOL 4133.

PLPA 4304. Applied Plant Disease Management. 4 Hours.
A plant pathology course emphasizing practical understanding of the concepts and principles of agronomic and horticultural crop disease management, including disease diagnosis, monitoring, and using models to forecast disease events. Prerequisite: PLPA 3004 or instructor consent.

PLPA 4333. Biotechnology in Agriculture. 3 Hours.
Discussion of the techniques, applications, and issues of biotechnology as it is being used in modern agriculture. Coverage includes the basics of molecular biology, production of transgenic plants and animals, and new applications in the agricultural, food, and medical marketplace. Lecture and discussion, 3 hours per week. This course is cross-listed with BIOL 4333.

PLPA 462V. Internship. 1-6 Hour.
Supervised practical work experience in pest management to develop and demonstrate professional competence. A maximum of 6 hours credit per semester or summer session is permitted. Faculty approval of projects proposal prior to enrollment, and written or oral reports are required. May be repeated for up to 9 hours of degree credit.

Faculty

Bluhm, Burt H., Ph.D., M.S. (Purdue University), B.S. (University of Oklahoma), Associate Professor, 2008.
Cartwright, Richard D., Ph.D. (University of California at Davis), M.S., B.S. (University of Arkansas), Extension Professor, 1993.
Correll, Jim, Ph.D., M.S. (University of California-Berkeley), B.S. (Pennsylvania State University), Distinguished Professor, 1989.
Egan, Martin J., Ph.D., B.S. (University of Exeter, United Kingdom), Assistant Professor, 2015.
Faske, Travis, Ph.D. (Texas A&M University), M.S. (Oklahoma State University), B.S. (Tarleton State University), Associate Professor, 2015.
Kirkpatrick, Terry, Ph.D. (North Carolina State University), M.S., B.S. (University of Arkansas), Professor, 1984.
Korth, Ken L., Ph.D. (North Carolina State University), B.S. (University of Nebraska), Professor, 1999.
Robbins, Robert Thomas, Ph.D. (North Carolina State University), M.S., B.S. (Kansas State University), University Professor, 1979.
Rojas, Clemencia, Ph.D. (Cornell University), M.S. (Purdue University), B.S. (Universidad de Los Andes, Colombia), Assistant Professor, 2015.
Rupe, John C., Ph.D., M.S. (University of Kentucky), B.S. (Colorado State University), Professor, 1984.
Spradley, J. Ples, M.S. (University of Arkansas), B.S. (Hendrix College), Extension Associate Professor, 1984.
Spurlock, Terry, Ph.D. (University of Arkansas), Extension Assistant Professor, 2015.
Tzanetakis, Ioannis E., Ph.D. (Oregon State University), M.S., B.S. (Agricultural University of Athens, Greece), Professor, 2008.
Wamishe, Yeshi Andenow, Ph.D. (University of Arkansas), M.S., B.S. (Addis Ababa University, Ethiopia), Associate Professor, 2011.