

# PLANT PATHOLOGY, BS

Plant pathology is the study of plants and their pathogens, the process of disease, and how plant health and disease are influenced by factors such as the weather, nonpathogenic microorganisms, and plant nutrition. It encompasses fundamental biology as well as applied agricultural sciences.

Plant pathology involves the study of plants and pathogens at the genetic, biochemical, physiological, cellular, population, and community levels, and how the knowledge derived is integrated and put into agricultural practice. Prerequisite to effective research, teaching, and extension in plant pathology is a breadth of interdisciplinary interest and knowledge, in a department and in its individual members, reaching from ecology to microbiology, from meteorology to applied mathematics, and from molecular biology to communication skills.

## LEARN THROUGH REAL-WORLD, HANDS-ON EXPERIENCES

Plant Pathology students learn in many field and lab courses, including classes that focus on economics of plant disease, interactions between plants and people, fungi, organic agriculture, and global food security. They can also take part in a summer field course, numerous internships, and research opportunities.

## BUILD COMMUNITY AND NETWORKS

Plant pathology is a field that thrives in, and makes its greatest contribution to, comprehensive institutions like the University of Wisconsin–Madison where the proximity and complementarity of basic sciences and the other applied agricultural sciences are exceptionally strong. Please visit the department's Extension and Outreach (<https://plantpath.wisc.edu/extension-overview/>) overview page for additional details on the department's outreach activities, public education programs, and student organizations.

## CUSTOMIZE A PATH OF STUDY

Undergraduates in Plant Pathology can choose between two tracks. The plant–microbe biology track has courses in basic math and sciences, including biology, chemistry, and physics, along with upper-level courses in plant pathology, biochemistry, and microbiology. This track is geared toward students who have an interest in receiving a broad education in the basic sciences or plan to pursue a graduate or professional degree.

The plant health and industry track includes some courses in basic math and sciences, as well as additional courses in agriculture and economics/management and upper-level courses in plant pathology, entomology, and other agricultural sciences. This track is designed for students who intend to work in industry after receiving their undergraduate degree.

Students are also able to explore double majors and a multitude of undergraduate certificates based on their unique educational and professional interests. More information about careers in plant pathology is available from the department.

## MAKE A STRONG START

All first-year students in CALS participate in a CALS First-Year Seminar. These courses help new students understand academic programs, access student services, and develop time management and study skills. First-

year students are also encouraged to participate in a First-Year Interest Group (<https://figs.wisc.edu/what/>) (FIG). Topics of interest to Plant Pathology students include global food security, plants and human well-being, and many other fascinating options. Students will discuss all of these options with advisors at orientation.

## GAIN GLOBAL PERSPECTIVE

The Plant Pathology program is a great choice for students who wish to participate in a study abroad experience. Students can choose from a multitude of destinations worldwide and can travel abroad during summer, spring, or fall terms. Students can explore studying abroad as a Plant Pathology major by utilizing the Plant Pathology Major Advising Page. Students work with their advisor and the CALS study abroad office to identify appropriate programs.

## HOW TO GET IN

### HOW TO GET IN

Requirements	Details
How to get in	No application required. All students who meet the requirements listed below are eligible to declare. For information on how to declare, visit Advising & Careers.
Courses required to get in	None
GPA requirements to get in	None
Credits required to get in	Must have fewer than 86 credits.
Other	Students who do not meet the requirements above or are not in good academic standing should schedule a meeting with CALS Dean on Call ( <a href="https://go.wisc.edu/g85h79">https://go.wisc.edu/g85h79</a> ( <a href="https://go.wisc.edu/g85h79/">https://go.wisc.edu/g85h79/</a> )) to discuss exceptions.

## PROSPECTIVE UW-MADISON STUDENTS

All prospective UW–Madison students must apply through the Office of Admissions and Recruitment (<https://www.admissions.wisc.edu/>).

Students interested in this major should select it as the first choice major on their UW–Madison application. Admitted students who enroll at UW–Madison and attend Student Orientation, Advising, and Registration (SOAR) with the College of Agricultural and Life Sciences have the option to declare this major at SOAR.

## REQUIREMENTS

### UNIVERSITY REQUIREMENTS

All undergraduate students must complete both the following Core General Education (Core GenEd) and University Degree and Quality of Work requirements. The requirements below apply to students whose first term at UW–Madison or whose earliest post-high school college attendance at any institution is Summer 2026 or later.

Students whose first term at UW–Madison or whose earliest post-high school college attendance at any institution occurred before Summer

2026 should refer to the archived Guide (<https://guide.wisc.edu/archive/>) for the requirements that apply to them.

## CORE GENERAL EDUCATION (CORE GENED) REQUIREMENTS

**Civics & Perspectives** 3 credits of Civics & Perspectives coursework.

**Communication & Literacy** 6 credits of Communication & Literacy coursework. This requirement may be partially satisfied by a qualifying placement test score. More information: <https://go.wisc.edu/qualifyingenglishplacement> (<https://go.wisc.edu/qualifyingenglishplacement/>)

**Humanities & Arts** 6 credits of Humanities & Arts coursework.

**Mathematics & Quantitative Reasoning** 6 credits of Mathematics & Quantitative Reasoning coursework. This requirement may be partially satisfied by a qualifying placement test score. More information: <https://go.wisc.edu/qualifyingmathplacement> (<https://go.wisc.edu/qualifyingmathplacement/>)

**Natural Science & Wellness** Complete both:

- 6 credits of Natural Science & Wellness or Natural Science & Wellness + Laboratory coursework.
- one course must be in Natural Science & Wellness + Laboratory coursework.

**Social & Behavioral Science** 3 credits of Social & Behavioral Science coursework.

**Total Credits** 30 credits.

For more information see the policy (<https://policy.wisc.edu/library/UW-1095/>).

## UNIVERSITY DEGREE AND QUALITY OF WORK REQUIREMENTS

All undergraduate degree recipients must complete the following minimum requirements. Requirements for some programs will exceed these requirements; see program requirements for additional information.

**Total Degree** 120 degree credits.

**Residency** Complete 30 credits in residence. A course is considered "in residence" if it is taken when in undergraduate degree-seeking status and:

- is offered by UW-Madison and completed on the UW-Madison campus or at an approved off-site location, or
- is offered by UW-Madison in an online or distance format, or is completed during participation in a UW-Madison study abroad/study away program.

**Quality of Work** Achieve at least the minimum grade point average specified by the school, college, and/or academic program.

**Math** Demonstrate minimal mathematics competence by:

- placing above MATH#160;96, or
- successfully completing MATH#160;96, or
- successfully completing a more advanced mathematics course such as MATH#160;112, MATH#160;113, MATH#160;114, MATH#160;141, MATH#160;211, or MATH#160;221.

**English Language** If required to take the UW-Madison English as a Second Language Assessment Test (MSN-ESLAT), demonstrate minimal English language competence by:

- earning credit for ESL#160;118, or
- achieving a qualifying MSN-ESLAT placement test score.

**Language** Complete one:

- 2 high school units of a single language other than English, or
- one course with the second semester Language designation.

**Major Declaration** Declare and complete the requirements for at least one major.

## COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

### CALS GRADUATION REQUIREMENTS

**Cumulative Credits**

- Students must earn 120 degree credits.
- Students declared in Biological Systems Engineering BS must earn 125 degree credits.

**Quality of Work** Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.

**Residency** Students must complete 30 degree credits in residence at UW-Madison after earning 86 credits toward their undergraduate degree.

In addition to the university's general requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Courses may not double count within university requirements, CALS college requirements, or major requirements. A course may count toward university requirements and a college and/or a major requirement; similarly, a course counted toward college requirements may also be used to satisfy a university and/or a major requirement.

### CALS COLLEGE REQUIREMENTS

**CALS First-Year Seminar** 1 credit. See the full list of eligible courses below or use this link: <https://go.wisc.edu/calsfirstyourseminars> (<https://go.wisc.edu/calsfirstyourseminars/>)

**Ethnic Studies** 3 credits with the Ethnic Studies designation.

**Communication A** Complete either:

- 1 course with the Communication A designation, or
- satisfaction of Communication A based on UW Placement Test.

**Quantitative Reasoning A** Complete either:

- 1 course with the Quantitative Reasoning A designation, or
- satisfaction of Quantitative Reasoning A based on UW Placement Test.

Introductory Chemistry Complete one:  
 • CHEM#160;103  
 • CHEM#160;108  
 • CHEM#160;109

CALS International Comparisons	3 credits. See the full list of eligible courses below or use this link: <a href="https://go.wisc.edu/calsinternationalcomparisons">https://go.wisc.edu/calsinternationalcomparisons</a> ( <a href="https://go.wisc.edu/calsinternationalcomparisons/">https://go.wisc.edu/calsinternationalcomparisons/</a> )
Communication B	1 course with the Communication B designation.
Quantitative Reasoning B	1 course with the Quantitative Reasoning B designation.
Biological Science	5 credits with the Biological Science designation.
Additional Science	3 credits with the Biological, Physical, or Natural Science designations.
Science Breadth	3 credits with the Biological, Physical, Natural, or Social Science designations.
Humanities	6 credits with the Humanities or Literature designation.
Social Sciences	3 credits with the Social Sciences designation.
Capstone Learning Experience	Each major articulates the required capstone learning experience.

### CALS First-Year Seminars

Code	Title	Credits
AN SCI 135	Grand Challenges and Career Opportunities in Animal and Dairy Sciences	1
BIOCHEM 100	Biochemistry First-Year Seminar	1
COUN PSY 125	The Wisconsin Experience Seminar	1
F&W ECOL 101	Orientation to Wildlife Ecology	1
F&W ECOL 105	Environment, Pollutants, and You	3
GENETICS 155	Freshman Seminar in Genetics	1
INTEGSCI 100	Exploring Biology	2
INTEGSCI 140	Exploring Service in STEM	1
INTER-AG 155	Issues in Agriculture, Environment, and Life Sciences	1
LSC 155	First-Year Seminar in Science Communication	1
MICROBIO 150	Microbiomes and Microbiology - First-Year Seminar	1
PLANTSCI/ AGROECOL 100	First-Year Seminar in Agroecology and Plant Science	1
PL PATH 155	Food Frontlines: Security, Sustainability, and Survival	1
SOIL SCI 155	First-year Seminar in Soil and Environmental Sciences	1

### Learning Community/Student Group Courses

The following learning community/student group courses are approved as CALS First-Year Seminars.

COUN PSY 117	PEOPLE First Year Seminar	1
INTEGSCI 110	BioHouse Seminar: Biology for the 21st Century	1
INTER-AG 117	GreenHouse Roots Seminar	1

INTER-AG 140	CALS QuickStart: Foundations	1
INTER-AG 175	WISE Seminar	1

### CALS International Comparisons

Code	Title	Credits
The 3 credit requirement may be fulfilled as either a stand-alone 3 credit course or as a set of courses as listed below.		
A A E/ENVIR ST 244	The Environment and the Global Economy	4
A A E 319	The International Agricultural Economy	3
A A E/ NUTR SCI 350	World Hunger and Malnutrition	3
A A E 352	Global Health: Economics, Natural Systems, and Policy (approved for enrollments Summer 2021 and later)	4
A A E/INTL ST 373	Globalization, Poverty and Development	3
A A E/INTL ST 374	The Growth and Development of Nations in the Global Economy	3
A A E/ECON 473	Economic Growth and Development in Southeast Asia	3
A A E/ECON 474	Economic Problems of Developing Areas	3
A A E/ECON/ INTL BUS 462	Latin American Economic Development	3
A A E/ECON 477	Agricultural and Economic Development in Africa	3
AGROECOL 377	Global Food Production and Health	3
AN SCI/DY SCI 370	Livestock Production and Health in Agricultural Development	3
ASIAN/HISTORY/ POLI SCI 255	Introduction to East Asian Civilizations (approved for enrollments Summer 2021 and later)	3-4
C&E SOC/SOC 341	Labor in Global Food Systems (approved for enrollments Summer 2020 and later)	3
C&E SOC/ENVIR ST/ SOC 540	Sociology of International Development, Environment, and Sustainability	3
CSCS 500	Global Health and Communities: From Research to Praxis	3
DY SCI 471	Food Production Systems and Sustainability	3
ENTOM/ ENVIR ST 201	Insects and Human Culture—a Survey Course in Entomology	3
ENTOM/ ENVIR ST 205	Our Planet, Our Health (approved for enrollments Fall 2026 and later)	3
ENTOM/ ZOOLOGY 371	Medical Entomology: Biology of Vector and Vector-borne Diseases	3
F&W ECOL/ ENVIR ST 100	Forests of the World (approved for enrollments Summer 2020 and later)	3
F&W ECOL/ ENVIR ST/ ZOOLOGY 360	Extinction of Species	3

LSC 251	Science, Media and Society (approved for enrollments Summer 2020 and later)	3
PL PATH/ BOTANY 123	Plants, Parasites, and People	3
PL PATH 311	Global Food Security	3
PLANTSCI 370	World Vegetable Crops	3
The following study abroad courses fulfill the CALS International Comparisons requirement. Only the specific course numbers and titles listed, including Topics titles (in parentheses), are approved to meet the CALS International Comparisons requirement.		
BIOCHEM 307	Study Abroad: Introduction to Biological Sciences Research in Japan (approved for enrollments Fall 2026 and later)	3
NUTR SCI/INTER- AG 421	Global Health Field Experience (UW Mobile Clinics and Health Care in Uganda)	3
INTER-AG 321 & INTER-AG/ NUTR SCI 421	Study Abroad Pre-Departure Seminar and Global Health Field Experience (UW Global Health Community Health and Asset-Based Community Development in Sri Lanka)	3
INTER-AG 321 & INTER-AG/ NUTR SCI 421	Study Abroad Pre-Departure Seminar and Global Health Field Experience (UW Agriculture, Health and Nutrition in Uganda)	3
INTER-AG/ NUTR SCI 421	Global Health Field Experience (UW Health, Education and Tanzanian Culture)	3

## MAJOR REQUIREMENTS

Courses may not double count within the major (unless specifically noted otherwise), but courses counted toward the major requirements may also be used to satisfy a university requirement and/or a college requirement. A minimum of 15 credits must be completed in the major that are not used to complete university or college requirements.

Code	Title	Credits
<b>Core Mathematics</b>		
Complete one of the following (or may be satisfied by placement exam):		5-6
MATH 112 & MATH 113	College Algebra and Trigonometry	
MATH 114	Precalculus	
<b>Core Chemistry</b>		
Complete one of the following:		5-9
CHEM 103 & CHEM 104	General Chemistry I and General Chemistry II	
CHEM 109	Advanced General Chemistry	
<b>Introductory Biology</b>		
Complete one of the following options:		10
Option 1 (preferred):		

BIOLOGY/ BOTANY/ ZOOLOGY 151 & BIOLOGY/ BOTANY/ ZOOLOGY 152	Introductory Biology and Introductory Biology	
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Option 2:

ZOOLOGY/ BIOLOGY 101 & ZOOLOGY/ BIOLOGY 102 & BOTANY/ BIOLOGY 130	Animal Biology and Animal Biology Laboratory and General Botany	
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Option 3:

BIOCORE 381 & BIOCORE 382 & BIOCORE 383 & BIOCORE 384	Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory and Cellular Biology and Cellular Biology Laboratory	
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### Core Physics

Complete one of the following:		4-5
PHYSICS 103	General Physics	
PHYSICS 201	General Physics	
PHYSICS 207	General Physics	

### Plant Pathology Core

PL PATH 300	Introduction to Plant Pathology	4
PL PATH/BOTANY 332	Fungi	4

Another PL PATH course numbered 300 and above. Cannot include PL PATH 375, PL PATH 299, PL PATH 399, PL PATH 590, PL PATH 681, PL PATH 682, or PL PATH 699.

### Capstone

PL PATH 590	Capstone in Plant Pathology	3
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### Focus Areas

Complete one of the following:		29-39
Plant-Microbe Biology Focus		
Plant Health and Industry Focus		

**Total Credits** **67-83**

## FOCUS AREAS

### Plant-Microbe Biology Focus

Code	Title	Credits
<b>Additional Mathematics and Statistics</b>		
Complete one of the following:		5
MATH 211	Survey of Calculus 1	
MATH 221	Calculus and Analytic Geometry 1	
Complete one of the following:		3-4
MATH 222	Calculus and Analytic Geometry 2	
STAT 301	Introduction to Statistical Methods	
STAT 371	Introductory Applied Statistics for the Life Sciences	

### Additional Chemistry

Complete one of the following options: 4-8

CHEM 343 & CHEM 344 & CHEM 345	Organic Chemistry I and Introductory Organic Chemistry Laboratory and Organic Chemistry II	
CHEM 341 & CHEM 342	Elementary Organic Chemistry and Elementary Organic Chemistry Laboratory	

**Biology**

Complete one of the following options: 5-8

Option 1:

MICROBIO 303 & MICROBIO 304	Biology of Microorganisms and Biology of Microorganisms Laboratory	
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GENETICS 466	Principles of Genetics	
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Option 2:

Complete two of the following:

BIOCORE 485	Principles of Physiology	
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BIOCORE 486	Principles of Physiology Laboratory	
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BIOCORE 587	Biological Interactions	
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**Additional Physics**

Complete one of the following: 4-5

PHYSICS 104	General Physics	
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PHYSICS 202	General Physics	
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PHYSICS 208	General Physics	
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**Plant Physiology**

BOTANY 500	Plant Physiology	3-4
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**Plant-Microbe Electives**

Complete 5 credits from the following: 5

BIOCHEM 501	Introduction to Biochemistry	
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BOTANY 300	Plant Anatomy	
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BOTANY 400 or BOTANY 401	Plant Systematics Vascular Flora of Wisconsin	
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BOTANY/ ZOOLOGY 460	General Ecology	
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ENTOM/ ZOOLOGY 302	Introduction to Entomology	
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Any PL PATH course numbered 300 and above

**Total Credits 29-39****Plant Health and Industry Focus**

Code	Title	Credits
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**Biology**

GENETICS 466	Principles of Genetics	3
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**Core**

PL PATH 559 or BOTANY 500	Diseases of Economic Plants Plant Physiology	3-4
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*Plant Health and Industry Electives*

Complete 24 credits from at least two different subject listings from the following: 24

BOTANY/ ENVIR ST/ ZOOLOGY 260	Introductory Ecology	
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BOTANY 300	Plant Anatomy	
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BOTANY 455	The Vegetation of Wisconsin	
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BOTANY/ ZOOLOGY 460	General Ecology	4
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BOTANY 500	Plant Physiology	
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BIOCHEM 501	Introduction to Biochemistry	
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C&E SOC/ SOC 140	Introduction to Community and Environmental Sociology	
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C&E SOC/ SOC 222	Food, Culture, and Society	
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C&E SOC/ AMER IND/ SOC 578	Poverty and Place	
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C&E SOC/ SOC 650	Sociology of Agriculture	
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ENTOM/ ENVIR ST 201	Insects and Human Culture-a Survey Course in Entomology	
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ENTOM/ ZOOLOGY 302	Introduction to Entomology	
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F&W ECOL/ ENVIR ST 100	Forests of the World	
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F&W ECOL/ ENVIR ST/ ZOOLOGY 360	Extinction of Species	
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F&W ECOL 550	Forest Ecology	
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MICROBIO 101	General Microbiology	
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MICROBIO 102	General Microbiology Laboratory	
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MICROBIO 303	Biology of Microorganisms	
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MICROBIO 304	Biology of Microorganisms Laboratory	
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NUTR SCI 132	Nutrition Today	
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NUTR SCI/ AN SCI/ DY SCI 311	Comparative Animal Nutrition	
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NUTR SCI 332	Human Nutritional Needs	
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NUTR SCI/ A A E 350	World Hunger and Malnutrition	
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NUTR SCI/ BIOCHEM 510	Nutritional Biochemistry and Metabolism	
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NUTR SCI 540	Community Nutrition and Health Equity	
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PLANTSCI 110	Introduction to Plant Science and Technology	
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PLANTSCI/ PL PATH 261	Sustainable Turfgrass Use and Management	
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PLANTSCI/ LAND ARC 263	Woody Landscape Plant Identification, Culture, and Use	
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PLANTSCI 300	Cropping Systems	
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PLANTSCI 302	Forage Management and Utilization	
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PLANTSCI 320	Environment of Cultivated Plants	
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SOIL SCI/ ATM OCN/ BSE 132	Water and People	
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SOIL SCI/ ENVIR ST/ GEOG 230	Soil: Ecosystem and Resource	
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SOIL SCI 301	General Soil Science	
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SOIL SCI/ Soils and Environmental Quality  
ENVIR ST 324

SOIL SCI 326 Plant Nutrition Management

Any PL PATH course numbered 300 and above not already taken for another category

ZOOLOGY 335 Human/Animal Relationships:  
Biological and Philosophical Issues

### Business

Complete 6 credits from the following: 6

ACCT I S 100 Introductory Financial Accounting

ACCT I S 211 Introductory Managerial Accounting

ACCT I S 300 Accounting Principles

ACCT I S 301 Financial Reporting I

ACCT I S 302 Financial Reporting II

ACCT I S 329 Taxation: Concepts for Business and  
Personal Planning

A A E 320 Agricultural Systems Management

A A E 101 Introduction to Agricultural and  
Applied Economics

A A E 322 Commodity Markets

A A E 323 Cooperatives and Alternative Forms  
of Enterprise Ownership

A A E 419 Agricultural Finance

A A E/ECON 421 Economic Decision Analysis

A A E/ECON 474 Economic Problems of Developing  
Areas

ECON 101 Principles of Microeconomics

ECON 102 Principles of Macroeconomics

LSC 270 Marketing Communication for the  
Sciences

M H R 300 Managing Organizations

M H R 305 Human Resource Management

**Total Credits 40-41**

## LEARNING OUTCOMES

### LEARNING OUTCOMES

1. Define and explain major concepts in the biological sciences including Plant Pathology.
2. Appropriately use biological instrumentation and laboratory techniques.
3. Explain and apply the scientific method including designing and conducting experiments and testing hypotheses.
4. Recognize the relationship between structure and function at all levels: molecular, cellular, organismal, and ecological.
5. Demonstrate a style appropriate for communicating scientific results in written and oral form.
6. Integrate math, physical sciences, and technology to answer biological questions using the scientific method.

## FOUR-YEAR PLAN

### FOUR-YEAR PLAN

This Sample Four-Year Plan is a tool to assist students and their advisor(s). Students should use it—along with their DARS report, the Degree Planner, and Course Search & Enroll tools—to make their own four-year plan based on their placement scores, credit for transferred courses and approved examinations, and individual interests.

Students must complete at least 120 total credits to be eligible for graduation.

### SAMPLE PLANT PATHOLOGY FOUR-YEAR PLAN—PLANT-MICROBE BIOLOGY FOCUS AREA

#### First Year

Fall	Credits Spring	Credits
CHEM 103	4 CHEM 104	5
MATH 221	5 General Education	3
First Year Seminar	1 MATH 222	4
General Education or Elective	3 Electives	3
<b>13</b>		<b>15</b>

#### Second Year

Fall	Credits Spring	Credits
CHEM 343	3 ZOOLOGY/BIOLOGY/ BOTANY 152	5
ZOOLOGY/BIOLOGY/ BOTANY 151	5 CHEM 344	2
General Education	6 CHEM 345	3
	General Education	3
<b>14</b>		<b>13</b>

#### Third Year

Fall	Credits Spring	Credits
PL PATH 300	4 PHYSICS 104	4
PHYSICS 103	4 PL PATH/BOTANY 332	4
Electives	6 GENETICS 466	3
CALS International Comparisons Course	3 Electives	6
<b>17</b>		<b>17</b>

#### Fourth Year

Fall	Credits Spring	Credits
MICROBIO 303	3 BOTANY 500	3
MICROBIO 304	2 PL PATH 590	3
Plant Pathology Core Elective	3 Plant Microbe Electives	5
Electives	6 Electives	6
<b>14</b>		<b>17</b>

**Total Credits 120**

## SAMPLE PLANT PATHOLOGY FOUR-YEAR PLAN—PLANT-HEALTH AND INDUSTRY FOCUS AREA

### First Year

Fall	Credits Spring	Credits
BIOLOGY/BOTANY/ ZOOLOGY 151	5 MATH 113	3
MATH 112	3 BIOLOGY/BOTANY/ ZOOLOGY 152	5
First Year Seminar	1 General Education	3
General Education	3 Electives	3-4
Elective	3	
	<b>15</b>	<b>15</b>

### Second Year

Fall	Credits Spring	Credits
CHEM 103	4 CHEM 104	5
General Education	6 General Education	3
Plant Health and Industry Elective	3-5 BOTANY 500	3
	Business Course	3-4
	<b>15</b>	<b>15</b>

### Third Year

Fall	Credits Spring	Credits
PL PATH 300	4 PL PATH/BOTANY 332	4
PHYSICS 103	4 GENETICS 466	3
Elective	1 Electives	2
Plant Health and Industry Elective	3 Plant Health and Industry Elective	6
CALS International Comparisons Course	3	
	<b>15</b>	<b>15</b>

### Fourth Year

Fall	Credits Spring	Credits
Plant Health and Industry Electives	6 PL PATH 590	3
Electives	6 Plant Health and Industry Electives	6
Business Course	3 Electives	6
	<b>15</b>	<b>15</b>

**Total Credits 120**

## ADVISING AND CAREERS

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### ADVISING

Students in plant pathology are assigned to a professional staff advisor who helps guide them throughout their undergraduate career. Academic advisors can address questions and concerns, provide advice, help create a four-year degree plan that meets academic and professional goals, and connect students to resources. Students in Plant Pathology are also assigned a faculty mentor when they declare the major. The faculty mentor helps students dive deeper into the field of plant pathology and learn about research, graduate school, and careers in the field.

## CAREER OPPORTUNITIES

Please visit our Internship & Job Resources (<https://plantpath.wisc.edu/undergrad-overview/undergrad-student-internship-job-resources/>) page for information on career opportunities available to plant pathology students.

Plant Pathologists from all educational levels are able to seek employment in a variety of areas. Some examples include:

- colleges and universities
- biotechnology companies
- state and federal agencies
- international agricultural research centers
- nurseries, greenhouses, and garden centers
- non-governmental organizations
- golf courses, public parks, and landscape maintenance companies
- diagnostic laboratories
- seed, plant production, and tissue culture companies
- a variety of private consulting firms

If you would like to know more about what is Plant Pathology and how an undergraduate education in Plant Pathology can help you make an impact on the world around you, please check out the “Plant Pathology: taking you further than you ever imagined (<https://www.youtube.com/watch?v=mzTE3StOHIQ>)” video from the American Phytopathological Society (<http://www.apsnet.org/Pages/default.aspx>).

## CAREER ADVISING

Students are encouraged to begin the career exploration process early in their UW–Madison journey by working with advisors, faculty, and CALS Career Services (<https://cals.wisc.edu/academics/undergraduate/current-students/career-services/>). These resources can help students reflect on their values, identify career goals, and outline strategies to achieve them. CALS Career Services advisors can help students one-on-one with their career goals, resume and cover letter help, interview prep, and more.

## WISCONSIN EXPERIENCE

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Undergraduates majoring in plant pathology at UW–Madison will find an inclusive, welcoming community where professors know their students and are able to provide guidance based on students’ specific academic and career goals. There are numerous opportunities to conduct research with internationally prominent faculty and to take part in the Wisconsin Idea, whereby faculty and students extend the knowledge developed at the university to stakeholders in Wisconsin and beyond for the betterment of society.

## INTERNSHIPS

Plant Pathology offers paid research internships during summer term, as well as paid or credit-earning research opportunities year-round. Undergraduates get a firsthand view of how research is conducted and what it means to be a professional scientist. For more information on internship opportunities available to plant pathology students, please visit our Internship & Job Resources (<https://plantpath.wisc.edu/undergrad-overview/undergrad-student-internship-job-resources/>) page.

## RESEARCH EXPERIENCE

Nearly all Plant Pathology undergraduates participate in field- or lab-based research with a professor. Research in the department has a long tradition of supporting grower needs. Many faculty are using the plethora of research tools available, including molecular biology and systematics, to answer questions that are directly applicable to grower groups. Please visit the department's Research (<https://plantpath.wisc.edu/research/>) page for additional details on research activities in Plant Pathology.

## STUDENT ORGANIZATIONS

By joining the Plant Pathology Undergraduate Club, majors get to know their fellow students outside the classroom. The department provides resources for students to meet experts who lead discussions on a range of topics including cutting-edge research and technology, career options, and how to apply and compete for jobs.

Undergraduate students are also welcome to join What's Eating My Plants (<https://win.wisc.edu/organization/whateatingmyplants/>) (WEMP). This organization, founded in 2010 by Plant Pathology graduate students, is dedicated to bridging the gap between the University and the greater Madison community. The students visit Family Science Nights at schools, community centers, and Saturday Science at the Wisconsin Institute for Discovery (WID) throughout the year.

## GLOBAL ENGAGEMENT

Plant Pathology students interested in studying issues on a global scale are encouraged to enroll in Plant Path 311: Global Food Security, which explores drivers of food insecurity: barriers to food production (pests, land availability, climate), barriers to food availability (politics, price, biofuels), and a greater need due to population growth. The Plant Pathology program is an excellent choice for students wishing to participate in a study abroad experience. Students can find more information about study abroad on the CALS study abroad advising page (<https://cals.wisc.edu/academics/undergraduate-students/international-programs/study-abroad-advising/>).

## COMMUNITY ENGAGEMENT AND VOLUNTEERING

The UW–Madison Division of Extension provides statewide access to the resources and research of the University of Wisconsin, other universities, and the United States Department of Agriculture so that the people of Wisconsin can learn, grow, and succeed at all stages of life. The UW–Madison Division of Extension carries out the tradition of the Wisconsin Idea (<http://www.wisconsinidea.wisc.edu/>) – extending the boundaries of the university to the boundaries of the state. UW–Madison Extension and outreach activities support educational programs for farmers, businesses, communities, families, and youth. More details can be found on the department Extension & Outreach (<https://plantpath.wisc.edu/extension-overview/>) page.

On campus, the Morgridge Center for Public Service (<https://morgridge.wisc.edu/>) provides resources to help students connect with volunteer opportunities based on their interests and goals.

## RESOURCES AND SCHOLARSHIPS

### RESOURCES AND SCHOLARSHIPS

Department scholarships are available to Plant Pathology students and fellowships are available to support research work with a professor. Students across the College of Agricultural and Life Sciences receive more than \$1.25 million in scholarships annually. Learn more about college scholarships here (<https://cals.wisc.edu/academics/undergraduate-students/financing-your-education/cals-scholarships/>).