

Department of Plant Pathology Department of Entomology mphm.osu.edu

Master in Plant Health Management Curriculum Advising Sheet	PROFESSIONAL SCIENCE MASTER'S
MPHM Graduate Chairs	
Dr. Andy Michel (michel.70@osu.edu)	For queries:
Dr. Christopher G. Taylor (taylor.1886@osu.edu)	Dr. Monica Lewandowski (lewandowski .52@osu.edu)

Requirements and Curriculum

Master in Plant Health Management students are required to complete a minimum of 35 credit hours of graduate work with a minimum cumulative GPA of 3.0. At least 25 credit hours must be earned at OSU.

	Semester Credit Hrs
Core Courses	24-25
Targeted elective in Plant Pathology or Entomology	2-3
Individual Studies or Internship	4-5
Directed Electives	2-5
Total credits	35

Course and Credit Hour Requirements

All students seeking a Master in Plant Health Management will take the following courses. Note this is an interdisciplinary program, so some core requirements are in the School of Environment and Natural Resources and Department of Horticulture and Crop Science.

Core Courses (24 - 25 credits):		<u>Credits</u>	<u>Semester</u>
PLNTPTH 5603	Plant Disease Management	3	Spring
PLNTPTH 5685 OR PLNTPTH 5060	Plant Disease Diagnosis		Summer Summer
ENTMLGY 5600 ENTMLGY 5800 ENR 5270 HCS 5422 HCS 5621	Principles and Applications of Integrated Pest Management Pesticide Science Soil Fertility Biology and Management of Weeds and Invasive Plants Physiology of Cultivated Plants	3 3	Spring Autumn Autumn Autumn Autumn
HCS 8887 OR HCS 5887	Experimental Design		Autumn Spring

PLNTPTH 7300 (1 cr, Spring) OR ENTMLGY 7300 (1 cr Autumn) Plant Health Management Seminar Students should enroll during your final semester, but all students are welcome and encouraged to attend weekly seminars via Zoom

Targeted Electives: Choose one of the following from Plant Pathology/Entomology (2-3 credits):

PLNTPTH 5110/ENTMLGY5110 Ecology and Management of Pathogens and Insects

	Affecting Trees in Forest and Urban Environments	Spring
PLNTPTH 5120	Diseases of Ornamental Plants2	Autumn
PLNTPTH 5130	Turfgrass Diseases and Integrated Turf Health Management	Autumn
PLNTPTH 5140	Diseases of Field Crops2	Autumn
PLNTPTH 5150	Diseases of Fruits and Vegetables2	Spring
ENTMLGY 5608	Turfgrass Insect and Mite Pests - Identification, Biology, and Management 2	Spring
ENTMLGY 5609	Greenhouse Plant Health and Pest Management	Autumn
ENTMLGY 5500	Biological Control of Arthropod Pests	Spring



Individual studies or internship (4-5 credits):

ENTMLGY 6193	Individual Studies	4-5
PLNTPTH 6193	Individual Studies	4-5
ENTMLGY 6502	Mentored Extension Experience in Entomology	1-3
PLNTPTH 8902	Mentored Extension/Outreach in Plant Pathology	4-5

Directed Electives

Through careful consultation with their advisors, students must take elective courses that best reflect their personal interest. The following are courses supporting different "fields of interest". Other classes may also be considered to meet individual needs of student. These courses should be approved by the student's advisor.

AEDECON 4330	The Sustainable Economy: Concepts and Methods	. 3
AEDECON 4597.01	Problems and Policies in World Population, Food, and Environment	. 3
AEDECON 4310	Environmental and Resources Economics	. 3
AEDECON 5250	Commodity Futures and Options Markets	. 2
AEDECON 5330	Benefit Cost Analysis	
AEDECON 6010	Applied Microeconomics I	
AEDECON 6020	Applied Microeconomics II	
ACEL 7300	Advanced Teaching Methods	. 3
ACEL 7320	Adult Learning and Professional Development	
ACEL 7700	Documenting Change through Evaluation and Accountability	. 3
ACEL 7230	Strategic and Program Planning for Visionary Change	. 3
ACEL 8420	Leadership and Administration in Agriculture and Extension Education .	
ACEL 8835	Methods in Teaching Agriculture	
EEOB 5460	Physiological Ecology	. 3
ENR 5265	Characterization of Soil in Field and Laboratory Sampling	. 2
HCS 5602	Ecology of Agriculture	
HCS 7625	Plant Breeding and Biotechnology	
HCS 7821	Advanced Crop Physiology	. 3
Advanced Statistics Co	ourse (agreed upon by SAC)	. 3

In addition to the courses listed above, the following courses may also be taken as electives:

ENTMLGY 5420	Insect Behavior Mechanisms and Function	. 3
ENTMLGY 6410	Insect Ecology and Evolutionary Processes	. 3
ENTMLGY 6704	Systems Analysis from Molecules to Ecosystems	. 2
ENTMLGY 7910	The Nature and Practice of Science	. 2
PLNTPTH 5040	Science of Fungi: Mycology Lecture	. 3
PLNTPTH 5041	Science of Fungi: Mycology Lab	. 1
PLNTPTH 6001	Advanced Plant Pathology	. 3
ENR 5600	Sustainable Agriculture and Food Systems	. 3

Final Exam

Following the requirements of the Graduate School, each student will complete a final Master's Examination which will include **both** a written and oral examination. The examination will evaluate the student's proficiency and understanding of his/her field of study, with emphasis on the topic selected from students special projects/internships.