

Date Submitted: 01/17/25 3:01 pm

Viewing: ENPLMS ~~ENTOMS~~ : Entomology and Plant Pathology, ~~Entomology~~, Master of Science

Last approved: 10/04/24 11:49 am

Last edit: 03/04/25 3:12 pm

Changes proposed by: hutch

Catalog Pages Using this Program

Entomology\_(ENTO)

Submitter:

User ID:

hutch gdaugher

Phone:

575.5389 5454

Program Status

Active

Academic Level

Graduate

Type of proposal

Major/Field of Study

Select a reason for this modification

Reconfiguring an Existing Degree--(LON)

Are you adding a concentration?

No

Are you adding or modifying a track?

No

Are you adding or modifying a focused study?

No

Effective Catalog Year

Fall 2026

College/School Code

Bumpers College of Agricultural, Food, and Life Sciences (AFLS)

Department Code

Department of Entomology and Plant Pathology (ENPL)

Program Code

ENPLMS ~~ENTOMS~~

In Workflow

1. AFLS Dean Initial
2. GRAD Dean Initial
3. Provost Initial
4. Director of Curriculum Review and Program Assessment
5. Registrar Initial
6. Institutional Research
7. ENPL Chair
8. ENPL Curriculum Committee
9. AFLS Faculty
10. AFLS Dean
11. Global Campus
12. Provost Review
13. Graduate Council
14. Faculty Senate
15. Provost Final
16. Provost's Office-- Documentation sent to System Office
17. Higher Learning Commission
18. Board of Trustees
19. ADHE Final
20. Provost's Office-- Notification of Approval
21. Registrar Final
22. Catalog Editor Final

Approval Path

1. 01/17/25 2:47 pm  
Vicky Watkins

Degree

Master of Science

CIP Code

(watkinsv): Rollback  
to Initiator

2. 02/14/25 11:05 am  
Lona Robertson  
(ljrobert): Approved  
for AFLS Dean Initial

3. 02/18/25 1:49 pm  
Jim Gigantino  
(jgiganti): Approved  
for GRAD Dean  
Initial

4. 02/18/25 1:53 pm  
Jim Gigantino  
(jgiganti): Approved  
for Provost Initial

5. 03/04/25 3:04 pm  
Lisa Kulczak  
(lkulcza): Approved  
for Director of  
Curriculum Review  
and Program  
Assessment

6. 03/04/25 3:12 pm  
Gina Daugherty  
(gdaugher):  
Approved for  
Registrar Initial

7. 03/04/25 3:39 pm  
Doug Miles  
(dmiles): Approved  
for Institutional  
Research

8. 03/05/25 8:41 am  
Ken Korth (kkorth):  
Approved for ENPL  
Chair

9. 03/05/25 8:44 am  
Garry McDonald  
(gmcdonal):  
Approved for ENPL

Curriculum  
Committee

- 10. 03/05/25 3:00 pm  
Kristen Gibson  
(keg005): Approved  
for AFLS Faculty
- 11. 03/05/25 3:04 pm  
Lona Robertson  
(ljrobert): Approved  
for AFLS Dean
- 12. 03/05/25 3:15 pm  
Suzanne Kenner  
(skenner): Approved  
for Global Campus
- 13. 03/06/25 9:00 pm  
Jim Gigantino  
(jgiganti): Approved  
for Provost Review
- 14. 03/21/25 3:49 pm  
Phyllis Howell  
(pahowell):  
Approved for  
Graduate Council

History

- 1. May 14, 2019 by  
Heather Jorgensen  
(jorgense)
- 2. Dec 8, 2023 by Gina  
Daugherty  
(gdaugher)
- 3. Apr 18, 2024 by  
Gina Daugherty  
(gdaugher)
- 4. Oct 4, 2024 by Jean  
Mitchell (jem03)

01.1105 ~~26.0702~~ - Plant Protection and Integrated Pest Management. ~~Entomology.~~

Program Title

Entomology and Plant Pathology. ~~Entomology,~~ Master of Science

## Program Delivery

## Method

On Campus

Is this program interdisciplinary between two or more colleges or schools?

No

Do the proposed changes impact any specific course(s) from another college or school?

No

What are the total 30  
hours needed to  
complete the  
program?

## Program Requirements and Description

### Requirements

**Requirements for the Master of Science Degree:** Completion ~~students must register for a minimum of a minimum of 24 semester~~ 30 hours of coursework as outlined by the student's of graduate advisory committee plus six semester hours of credit including 6 thesis credit. hours. ~~Students studying for the Master of Science degree with a limited undergraduate background in entomology may be expected to complete more than the minimum number of 30 credit hours required for the degree.~~ A thesis thesis, reporting results of original research is research, and a final comprehensive oral examination also are required. The student must pass a comprehensive oral examination and successfully defend the thesis upon its completion. Students should also be aware of Graduate School requirements with regard to master's degrees. Students choose a concentration of either Entomology or Plant Pathology.

Specific course prerequisites are not required for admission to the M.S. program. However, a strong undergraduate background in an agricultural, biological, and/or physical science is highly desirable. Deficiencies or prerequisites for advanced courses may be included in the individual student's academic program.

~~Specific requirements follow:~~ **General Course Requirements:** The degree program and coursework for each candidate will be arranged on an individual basis in collaboration with the student's faculty advisor and committee. basis: Students in the ENPL master's program are required to complete at least one credit hour of ENPL 50001 Seminar on Presentation Skills, and one credit hour of ENPL 60701 Colloquium – Advanced Topics in Entomology and Plant Pathology. ~~M.S. students must register for a minimum of 30 hours of graduate credit including 6 thesis hours.~~ **Prerequisite Requirements:** ENTO 30103. Introductory Entomology (Fa) or its equivalent. 3 hours. **Core Course Requirements:** ~~The student must take or have taken courses equivalent to:~~ A course in statistics for graduate credit is also required. **Seminar Requirements:** ~~Two semester hours of seminar are required.~~ With approval from the student's advisory committee, substitutions for ENPL 50001 Seminar hours may be allowed taken in Entomology (ENPL 60701) or, with Department Head approval, as a formal for-credit seminar offered in another department within the the university. Each In addition, each student is required to present a seminar on their his/her thesis

research plans during the first year of the degree program and an exit seminar on the thesis research prior to graduation. ~~leaving the program.~~

Students should have completed an introductory undergraduate course in entomology or plant pathology, or an equivalent course. Incoming students without any coursework in the disciplines are required to complete a minimum of two credit hours of a graduate-level special problems course covering foundational topics in either entomology or plant pathology. ~~General~~

Course Requirements:

ENTO-50204	Insect Diversity and Taxonomy	4
ENTO-50503	Insect Ecology	3
ENTO-51503	Insect Pest Management	3
ENTO-61103	Insect Physiology and Molecular Biology	3
<u>Core Courses (students must take or have taken courses equivalent to):</u>		<u>2</u>
<u>ENPL 50001</u>	<u>Seminar on Presentation Skills</u>	
<u>ENPL 60701</u>	<u>Colloquium - Advanced Topics in Entomology and Plant Pathology</u>	
<u>Concentration Hours</u>		<u>13</u>
<u>Electives from either the ENPL or PLPA catalog <sup>2</sup></u>		<u>9</u>
<u>Thesis Hours</u>		<u>6</u>
Total Hours		30

~~2~~  
Depending on which concentration the student chooses.

~~Residence Requirements: A minimum of 30 weeks in residence is required for the M.S. degree.~~ **Grade Point Average Requirement:** A minimum 3.00 GPA must be maintained. If the cumulative GPA falls below 3.00, or research or general academic progress is unsatisfactory, the student’s performance will be re-evaluated by the Advisory Committee and a recommendation made on continued status as a graduate student. For details about this process, please see the Graduate Student Handbook on the departmental website.

**Comprehensive Examination:** A comprehensive oral examination covering coursework and defense of the thesis research is required. The examination is generally taken during the student’s final semester.

Graduate Courses in ENPL M.S. program:  
Entomology Catalog  
Plant Pathology Catalog

~~Students should also be aware of Graduate School requirements with regard to master's degrees.~~

Are Similar Programs available in the area?

No

Estimated Student Demand for Program

24 ~~12~~

Scheduled Program 2030-2031 ~~2025-~~Review Date 2026

## Program Goals and Objectives

## Program Goals and Objectives

The M.S. ~~program~~ programs in Entomology and Plant Pathology seeks to prepare students for impactful careers in research and education ~~research, education, and outreach~~ in academia, or the private and ~~and~~ public sectors. We strive to ensure graduates have a fundamental understanding of entomology or plant pathology, ~~entomology~~, competency in specialty areas, problem-solving and analytical abilities, ~~ability~~, oral and written communication skills, and demonstrated leadership.

## Learning Outcomes

## Learning Outcomes

## 1) Discipline Expertise and Critical Thinking.

Graduates will have and be able to apply a broad-based knowledge of the scientific disciplines ~~entomology~~ through coursework and topical seminar courses that involve discussion of ~~pertinent~~ contemporary scientific ~~scientific~~ literature.

## 2) Critical Thinking, Problem Solving, and Technical Skills.

Graduates ~~Graduates~~ will be able to apply their discipline-based knowledge and critical thinking skills to identify a problem, develop hypotheses, apply and modify existing ~~design-original~~ research methodologies, and critically evaluate their own findings and those of others while adhering strictly to ethical and scientific principles. ~~and interpret research results through statistical inference.~~

3) Communication Skills.

Graduates will have the ability to prepare ~~All students are prepared in analytical skills~~ and deliver written and oral communications appropriate for a range ~~use those skills in defense~~ of audiences that convey clear, relevant, scientifically sound and memorable messages. ~~a dissertation.~~

3) Communication Skills:

~~Graduates will be able to communicate effectively.~~ Students are prepared ~~to communicate~~ through written and oral presentations in courses, seminars, ~~seminar presentations, presentations at~~ scientific meetings and outreach events, ~~presentations of non-technical material to the public.~~

## Description and justification of the request

Description of specific change	Justification for this change
We propose renaming the MS program to align with the newly merged department name, adding two concentrations to reflect the department's disciplines, and updating the CIP code to accurately represent the program's scope. These changes will enhance the program's relevance,	We are requesting the changes to this program to better serve students and enhance training of professionals in the areas of pest management, microbial and insect research, and disease management in agricultural plants and animals. The new MS program will have several core

Description of specific change	Justification for this change
appeal, and alignment with emerging academic and industry trends.	<p>courses for all students, and elective courses which allow students to concentrate training in either entomology or plant pathology. This model fits well with the structure of our academic unit and reflects changes in our discipline and our faculty makeup. In 2019, the department of Entomology and Plant Pathology was formed via the merger of two formerly independent units. The proposed changes to our MS program will create a much more efficient and effective means to provide a well-rounded curriculum for our students, and ultimately improve workforce training. The outcome should be students that are more broadly trained to deal with problems and questions in agricultural, biological and ecological settings. Over the past several decades, the independent MS programs in entomology or plant pathology sometimes struggled to maintain suitable numbers of graduates. Combining these two disciplines within a single program should alleviate those issues, and more importantly will provide a more robust educational program for our students. These changes take good advantage of the changes to our faculty expertise and the positive synergism that has resulted.</p>

## Upload attachments

[Letter of Notification Form\\_ENPL MS.pdf](#)

[ENPLMS Before and After.pdf](#)

## Reviewer Comments

**Vicky Watkins (watkinsv) (01/17/25 2:47 pm):** Rollback: sending back per dept request

**Lisa Kulczak (lkulcza) (03/04/25 11:14 am):** Reformatted program requirements based on conversation with dean's office. The college and department is encouraged to review.

**Lisa Kulczak (lkulcza) (03/04/25 11:44 am):** Uploading curriculum "before and after" documentation as provided by dean's office.

**Lisa Kulczak (lkulcza) (03/04/25 3:04 pm):** ATTENTION REGISTRAR: Please remove Undergraduate Council from the workflow.

**Gina Daugherty (gdaugher) (03/04/25 3:12 pm):** Undergraduate Council removed from workflow.

