



## AOM3333 Pesticide Application Techniques

Fall, 2025  
In-person, 3 Credits

### Instructor

Dr. Wonsuk "Daniel" Lee  
Frazier Rogers Hall, Room 207  
(352) 294-6721  
[wslee@ufl.edu](mailto:wslee@ufl.edu)

<https://abe.ufl.edu/people/faculty/wonsuk-lee/>

In-person office hours: I have an open-door policy. You are welcome to visit me whenever I am available or by appointment.

### Teaching Assistant

[To be determined]

### Course Description

AOM 3333 Pesticide Application Techniques. F. *Credits*: 3. Equipment and methods to apply pesticides in agriculture. Techniques used to avoid misapplication, a common cause of pesticide failures, are emphasized.

### Course Learning Objectives

1. To be familiar with agricultural pests and the measures for controlling them.
2. To understand different sprayer components and learn how they work.
3. To be able to calibrate different types of spray equipment properly. Special emphasis will be placed on using the proper equipment and techniques for applying pesticides.
4. To become familiar with pesticide laws, labels, and safety

### Course Prerequisites

Junior/Senior standing in the College of Agricultural and Life Sciences and other related disciplines, or instructor approval. Minimum technical skills include basic math and logical thinking skills.

### Textbooks

*SM 53 Private Applicator Agricultural Pest Control*, 4<sup>th</sup> Edition, by Frederick M. Fishel, UF/IFAS Communication Services, Revised 2019. (<http://ifasbooks.ifas.ufl.edu/p-118-private-applicator-agricultural-pest-control.aspx>). See the UF/IFAS Bookstore website: <https://ifasbooks.ifas.ufl.edu/>.

*SM 1 Applying Pesticides Correctly: A Guide for Pesticide Applicators (CORE)*, 7<sup>th</sup> Edition, by Frederick M. Fishel, UF/IFAS Communications Services, 2014 (Revised for 2015, <https://ifasbooks.ifas.ufl.edu/p-104-applying-pesticides-correctly-a-guide-for-pesticide-applicators-core.aspx>):

You will summarize each chapter every week during the first 9 weeks, so that you can use the summary to (1) learn the basic knowledge by yourself and (2) take a pesticide application license exam in the future. Every Monday, **starting September 8th**, you must submit a summary of each chapter in the E-Learning. Start with “Terms to Know” and include all sub-sections of each chapter. The summary should be at least three pages. Do not use any text conversion tools. Each week, one to two of the best summaries will be chosen and awarded extra credit.

## Technical Support

UF Computing Help Desk & Ticket Number: All technical issues require a UF Helpdesk Ticket Number.

The UF Helpdesk is available 24 hours a day, 7 days a week. <https://helpdesk.ufl.edu/> | 352-392-4357

## Weekly Course Schedule (Dates are approximate)

Week (Date)	Lecture (Mon & Wed)	Lab (Wed)	Quiz	SM1 Summary	HW	Test
1 (8/25)	Module 1 – Pest identification and control	(Continue Module 1)				
2 (9/1)	Labor Day Holiday	Lab 1 – General-purpose farm sprayer			#1	
3 (9/8)	Module 2 – Nozzles & flow rate formula; Solve HW #1	Lab 2 – Nozzle pressure vs. flow rate and spray patterns	#1	Ch. 1		
4 (9/15)	Module 3 – Sprayer parts and calibration	Lab 3 – Calibration of a general-purpose farm sprayer	#2	Ch. 2		
5 (9/22)	(Continue Module 3)	Test 1 (No Lecture & Lab)	#3	Ch. 3		Test 1
6 (9/29)	Module 4 – Pesticide formulation and arithmetic	Lab 4 – Aerial pesticide application		Ch. 4	#2	
7 (10/6)	(Continue Module 4)	Lab 5 – Airblast sprayer calibration at PSREU	#4	Ch. 5		
8 (10/13)	Module 5 – Pumps	Solve HW #2	#5	Ch. 6		
9 (10/20)	Module 6 – Granule applicators	Lab 6 – Pumps	#6	Ch. 7		
10 (10/27)	Module 7 – Drift and Aquatic weed control	Test 2 (No Lecture & Lab)	#7	Ch. 8		Test 2
11 (11/3)	(Continue Module 7)	Lab 7 – Granular application		Ch. 9	#3	
12 (11/10)	Module 8 – Laws, labels, and safety;	Pesticide applicator license exam - Category	#8			
13 (11/17)	(Continue Module 8 – Laws, labels, and safety); Pesticide applicator license exam	Module 9 – Variable Rate Technology (VRT); Lab 8 – VRT	#9			
14 (11/24)	Thanksgiving!	Thanksgiving!				
15 (12/1)	(Continue Module 9); Solve HW #3	Test 3 (No Lecture & Lab)	#10			Test 3

## Grading Policy

Course grading is consistent with [UF grading policies](#).

### Course Grading Structure

Assignment Type	Percent of Final Grade
Quizzes	10%
Lab assignments	10%
Homework	10%
Tests (3)	20% each
SM1 Summary	10%

#### Course grading will be based on the following items:

1. **Quizzes** will be given every Monday at the end of the lecture. The quiz problems are from the previous week's lecture, lab exercise, and/or homework. Quizzes will help you study course materials and achieve course objectives. Quizzes cannot be made up.
2. **Lab assignments** will be handed out for every laboratory session. They will help you better understand the goals of lab exercises and facilitate opportunities to work on the calibration of various sprayers. Lab assignments should be submitted in the E-Learning.
3. **Homework** – Three sets of problems related to the calibration of pesticide application equipment will be assigned. The problems will be similar to calibration problems given on the quizzes and tests. The support numbers needed to arrive at the problem answer must be shown on the homework paper. You will receive credit if you have tried to solve them. Homework problems are from actual spray applications and help you practice solving real situations for sprayer calibration. Homework should be submitted in the E-Learning.
4. **Tests** – There will be three (3) tests. There will not be a comprehensive final examination. The test could have calculation problems similar to those in the previous test(s), but verbal questions will be tested only once. Tests will help review course materials and practice more calibration problems toward achieving course objectives.
5. **SM1 Summary** – Start with “Terms to Know” and include all sub-sections of each chapter. The SM1 summary helps you understand the core information of pesticide application, which we don't cover during lectures and lab exercises. Every Monday, starting September 8th, you must submit a summary of each chapter in the E-Learning. Each week, one to two of the best summaries will be chosen and awarded extra credit.
6. **All assignments should be submitted in the E-Learning.** You must submit them at least a few minutes before class to attend class on time. Email submissions will NOT be accepted.
7. **Late submission policy:** All assignments are due at the beginning of the class. Thereafter, a 10% reduction/day.

## Grading Scale

Grade	Percentage
A	91.0 – 100%
A-	89.0 – 90.9%
B+	86.0 – 88.9%
B	82.0 – 85.9%
B-	79.0 – 81.9%
C+	76.0 – 78.9%
C	72.0 – 75.9%
C-	69.0 – 71.9%
D+	66.0 – 68.9%
D	62.0 – 65.9%
D-	59.0 – 61.9%
S	Below 59.0%

## Academic Policies and Resources

Academic policies for this course are consistent with university policies. See <https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/>

## Campus Health and Wellness Resources

Visit <https://one.ufl.edu/whole-gator/topics> for resources that are designed to help you thrive physically, mentally, and emotionally at UF.

Please contact [UMatterWeCare](#) for additional and immediate support.

## Software Use

All faculty, staff, and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

## Privacy and Accessibility Policies

- Instructure (Canvas)
  - [Instructure Privacy Policy](#)
  - [Instructure Accessibility](#)
- Zoom
  - [Zoom Privacy Policy](#)
  - [Zoom Accessibility](#)