# ENY5226C

# PRINCIPLES OF URBAN PEST MANAGEMENT

Fall 2024 | 3 Credit Hours | Online Asynchronous Format



# **Office Hours**

Tuesdays from 5-6 PM or by appointment. Students are encouraged to contact me at <a href="mailto:estellemartin@ufl.edu">estellemartin@ufl.edu</a> to arrange a time to meet with subject line: SPRING 2024 – ENY5226C meeting request. All meetings will occur via Zoom. Please allow for a 48h response time.

# **Course Description**

This course covers the methods of managing urban pests, such as cockroaches, fleas, termites, flies, stored food pests, and ants. Chemical and nonchemical methods of control will be emphasized, along with safety, laws, and regulations.

#### Instructor

#### **Dr. Estelle Martin**

#### **OFFICE:**

306, Steinmetz Hall 1881 Natural Area Drive Gainesville, FL 32611

#### **PHONE**

352-294-6935

#### **EMAIL**

estellemartin@ufl.edu

# **Prerequisite Knowledge and Skills**

There are no prerequisites to this course.

## **Instructional Methods**

The class will be conducted entirely online uses Canvas. You are responsible for the course content in Canvas. You should view the lectures and read the text in the order shown in the class outline. You should also view the video clips, which serve to illustrate the items discussed.

# **Research Report**

Critical thinking & communication for the graduate version of the course (ENY5226) will be evaluated by writing a report to develop a situational pest management plan for a specific urban pest insect. The plan should use referred scientific literature as much as possible to (1) detail the biology of the pest and (2) the specific problem or challenges of the situation, and (3) integrated approaches to be used for controlling the pest. The project will take the form of a written report in Word (2000-2500 words in length).

## **Laboratories**

There are 30 Laboratory activities that are multiple and located at the Canvas website. Students can do the on-line laboratory activities as often as necessary until the due date and will get credit for the best grade obtained for each assessment.

# **Textbook**

Available through digital library course reserves, no purchase is necessary: Mallis, Arnold. *Handbook of Pest Control*. 10th Edition. 2011 Mallis Handbook Co., Cleveland, OH. ISBN: 978-1-890561-02-4. Library of Congress Catalogue Card No.: 2010928977

# **Course Policies**

# **Attendance Policy**

There is no attendance policy, but it will be difficult to pass the course unless you listen to the lectures carefully. Students are encouraged to work on this class weekly. All writing assignments are due by the date posted and must be submitted using Canvas.

# **Course Grading**

The exams (lecture & lab) will be timed exams. The final exam (lecture & lab) will be comprehensive of all lectures.

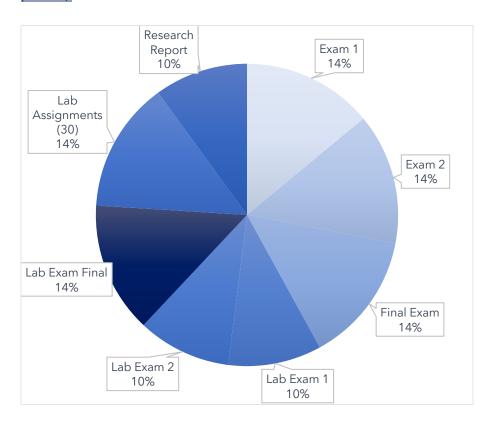
#### LEARNING OBJECTIVES

This course has several purposes:

Through completing the course students will be expected to:

- Know the different categories of urban pest insects and how they are targeted based on their biology & behavior.
- Know the steps involved with managing urban pests by chemical, non-chemical and integrated (IPM) approaches.
- Know where and how insecticides are applied in urban settings.
- Know the classes of insecticides used for urban pest management, their modes of action, and how insecticide resistance develops.
- 5. Know the fundamentals of pesticide safety, as well as pest control laws and regulations.

Grade point equivalencies for grades are found at: <a href="https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</a>



#### **Grades and Grade Points**

For information on current UF policies for assigning grade points, see: <a href="https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/</a>.

#### **Online submissions**

Students are responsible for verifying assignments are successfully uploaded/submitted into Canvas. The instructor cannot be responsible for internet connections or failures. Locating a hard-wired connection (UF or public library) greatly reduces the instance of technical issues. Contact the instructor early if you foresee difficulty with maintaining a hard-wired connection (e.g. military service or living abroad). 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

# **Grading Scheme**

The final grade, based on accumulation of points, will be assigned as:

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А	93-100
A-	90-92.9
B+	87-89.9
В	83-86.9
B-	80-82.9
C+	77-79.9
С	73-76.9
C-	70-72.9
D+	67-69.9
D	63-66.9
D-	60-62.9
E	<59.9 and below

## **UF Policies**

## **Attendance and Make-Up Work**

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <a href="https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/">https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/</a>.

For online course with recorded materials a statement informing students of privacy related issues such as: Our class sessions may be audio visually recorded for students in the class to refer and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

## **In-Class Recording**

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or guest lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine,



# Course Format and Requirements

This course is offered as pre-recorded lectures delivered by the eLearning course management system Canvas. Slides are available as PDF as well as transcripts should you care to print them.

newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student

#### **Online Course Evaluation Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at:

https://gatorevals.aa.ufl.edu/public-results/.

## **Academic Honesty**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:

http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

## **Course Communication**

Please post course related questions on the discussion board and send private question related to the course or grades to estellemartin@ufl.edu



#### **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.

#### **Services for Students with Disabilities**

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services, and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation

0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

#### **Academic Resources**

- E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 <a href="https://helpdesk.ufl.edu/">https://helpdesk.ufl.edu/</a> or via e-mail at helpdesk@ufl.edu.
- Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- <u>Library Support</u>: Various ways to receive assistance with respect to using the libraries or finding resources.
- <u>Teaching Center</u>: 1317 Turlington Hall, 352-392-2010. General study skills and tutoring.
- Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- Student Concern: Report Student Concerns or Conduct

# **Campus Helping Resources**

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575
 www.counseling.ufl.edu

Counseling Services
Groups and Workshops
Outreach and Consultation
Self-Help Library
Wellness Coaching

- U Matter We Care, www.umatter.ufl.edu/
- Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/.
- Student Success Initiative, http://studentsuccess.ufl.edu.

# **Course Calendar**

Due Date	Lecture # & Topic	Readings (Page #)	Lab assignments
Jan 17	1. Pest Management & Insecticide Labels	1497-1513	Lab 1
Jan 17	2. Insecticide Mode of Action Part I	1263-1265, 1271-1276	Lab 2
Jan 21	3. Insecticide Mode of Action Part II	1276-1284, 1306-1328	Lab 3
Jan 21	4. Insecticide Mode of Action Part III	1266-1270	Lab 4
Jan 28	5. Pesticide formulations	1284-1292	Lab 5
Jan 28	6. Sites of urban insecticide application & poisoning stats.		Lab 6
Feb 4	7. Urban insecticide application equipment	1438-1493	Lab 7
Feb 4	8. Domestic Roach Control	214-240	Lab 8
Feb 11	9. Peridomestic Roach Control	241-260	Lab 9
Feb 11	10. Subterranean termite control with soil termiticides I	340-376	Lab 10
	Exam 1	Lectures & Labs 1-10 on test	
Feb 18	11. Subterranean termite control with soil termiticides II	377-390	Lab 11
Feb 18	12. Subterranean termite control with baits	390-406	Lab 12
Feb 25	13. Drywood termite control techniques	406-415	Lab 13
Feb 25	14. Structural fumigation	1341-1388	Lab 14
March 3	15. Wood Boring Beetle control	493-503	Lab 15
March 3	16. Concepts of mosquito control	1065-1074	Lab 16
March 10	17. Control of human lice	534-543	Lab 17
March 10	18. Control of fleas	525-530	Lab 18

Due Dete	Lastina # O Tania	Deading (Dead #)	Laboration
Due Date March 24	Lecture # & Topic  19. Bedbug control	Readings (Page #) 598-627	Lab assignments Lab 19
	-	336-027	Lab 13
March 24	20. Silverfish control	1217-1127	Lab 20
	Exam 2	Lectures & Labs 11-20 on test	
March 31	21. Pest ant control	787-804	Lab 21
March 31	22. Fire ant control	799-802	Lab 22
April 7	23. Bee control	859-864	Lab 23
April 7	24. Wasp control	864-868	Lab 24
April 7	Critical Thinking Paper Due for undergrad (3225) students		
April 14	25. Control of filth breeding flies	985-999, 1011-1015	Lab 25
April 14	26. Stored food insect control	883-904, 954-958	Lab 26
April 21	27. Commodity fumigation	1373-1380	Lab 27
April 21	Critical Thinking Report Due for Grad (5226) students		
April 21	28. Control of occasional invaders	1197-1198, 1204-1205, 1210-1212,1237-1242	Lab 28
April 28	29. Pesticide safety	1295-1305	Lab 29
April 28	30. Pest control laws and regulations	1481-1493	Lab 30
	Final Exam	Material from entire course will be covered (Lecture & Lab separately)	