

PLSC 443/543 Turfgrass Entomology, Spring 2024
University of Tennessee, Knoxville
First *Spring Block* Section (22 January to 8 March 2024)
first Class Meeting will be 23 January 2024

COURSE INFORMATION

Course Section: 301- 32781

Course Credit Hours: 2 hours

Meeting Time and Place:

Tues. 2:30 – 3:45 pm, 161 Brehm Animal Sciences

Thurs. 2:30 – 4:20* pm, 161 Brehm Animal Sciences

* Course hours will vary to account for planned laboratory activities;
meeting durations will average 200 min. per week



Instructor:

Dr. Bill Klingeman

Ellington PSB 261

Office hours: TBA, by appointment

Phone: (865) 974-7964

E-mail: wklingem@utk.edu

COURSE DESCRIPTION

Biological study and collection of arthropods that challenge healthy turf and sod maintenance. Review and discussion of sampling/monitoring strategies and decision-making guidelines to help manage turfgrass pests. A *Spring Block*, 2-credit course for Junior PS students.

Course Value: Exposure to content and pests presented during this course will provide you with a working disciplinary vocabulary, awareness of key resources and diagnostic aids, as well as career-relevant knowledge that turfgrass industry professionals expect turfgrass science program graduates to possess upon degree completion.

Student Learning Objectives: After completing PLSC 443/543*, students will have practical knowledge about insect pest management in turfgrass systems and can expect to be able to:

- Function in a professional manner as an entry level turf industry employee bringing basic knowledge and familiarity with insect pests in turfgrass systems
- Explain how environmental and cultural pressures, including temperature, insect pathogens, natural enemies and management practices, can influence seasonal growth and development of turf pest populations
- Discuss the available options and implement appropriate monitoring techniques to survey for key insect pests in turf systems
- Know and discuss the basic strategies required to design and implement an IPM program for turf pests

LEARNING ENVIRONMENT

Lectures are generally given in conjunction with image-rich PowerPoint presentations. Note-taking guides may assist in organizing pest information and lecture notes should be supplemented with relevant information available from on-reserve resources and lab materials. Discussion is actively encouraged. Contributions from students and class participants should emphasize critical thinking relative to the topics being presented and inter-relationships to other material learned during the course.

Course Communications:

Unless expressly permitted, students are expected to please turn off cell phone ringtones and should refrain from text messaging. For in-person discussions, please contact me to schedule a visit to my office. I am generally available for 10-15 minutes after class and labs. Email is the preferred means of contact and replies will usually be made during business hours and within 24-48 hours. All correspondence from me will be sent to your UTK email address. Please make sure emails are written in a professional manner. Texted inquiries may not receive a response, particularly outside university business hours and during academic closures. For technical issues, contact the OIT HelpDesk via phone (865) 974-9900 or online at <http://help.utk.edu/>.

HOW TO BE SUCCESSFUL IN THIS COURSE

Students are expected to:

- Be responsible for knowing how to use CANVAS & how to submit assignments on the site.
- Be prepared for all classes and labs; preparation includes pre-printing relevant lab worksheets and diagnostic resources; undertaking recommended readings
- Actively contribute to the learning activities in class and be respectful of others
- Commit to setting and meeting high expectations for yourself
- Stay up-to-date on materials posted to the course Canvas site
- Read and (if necessary) respond to communications from the instructor
- Completely read and follow all instructions given for assignments and assessments
- Ask the instructor for clarification when needed
- Abide by the [UT Student Code of Conduct](#).

The Instructor is expected to:

- Be prepared for all classes and labs
- Evaluate all fairly and equally
- Be respectful of all students
- Engage and encourage constructive discussion and conversations
- Create and facilitate meaningful learning activities
- Behave according to University codes of conduct

Recommended Text & Readings (On Reserve in Pendergrass Library):

Destructive Turfgrass Insects: Biology, Diagnosis & Control, 1st edition

Daniel A. Potter. 1998. John Wiley & Sons

Recommended (Optional) Resources:

Handbook of Turfgrass Insect Pests, 2nd Ed. 2012. Brandenburg & Freeman.

Destructive Turf Insects. 2000. H. Niemczyk & D. Shetlar.

Lecture Topics: (*Topic order & content are subject to change during the semester*)

- Basic Principles: an introduction & overview to Entomology
- Life cycles & the concept of physiological time
- Management actions that influence arthropod populations
- Pesticides, safety & risk management
- Turfgrass Pest & Beneficial Insects: Feeding Guilds
 - Weevils, scarabs & white grubs
 - Lepidoptera & chewing pests
 - Homoptera, Hemiptera & *Others* (Nuisance Pests & Beneficial Organisms)
- Scouting, Monitoring & Thresholds: IPM for Turfgrass Pests

Course Requirements, Assessments and Evaluations

Attendance/Notes: It is critical that you attend each class. Because there is no assigned textbook, all test material will be taken from class lectures, discussions and assigned readings. Students are responsible for obtaining notes from peers related to all content missed due to absence and illness. Please inform Dr. K ahead of classes and labs about anticipated/illness related absence.

Required Equipment:

A laptop or smart phone with webcam and microphone capabilities.

GRADING AND PERFORMANCE LEVELS

You will ascend performance levels based on points accrued through accomplishing various activities. Points accrued to achieve each level cannot be lost. Career and professional expectations of ‘A grade’ students are high and achieving the highest levels is difficult. In fact, it may require you to seek opportunities to pursue additional *Challenge Opportunities*. Performance levels are regularly updated (weekly) and can be made available to you at a scheduled office appointment. The level structure is tied to your final grade as follows:

An example of leveling structure that is used to determine your final grade follows.

Please NOTE: *the tallies below represent an example only. Final point accruals are expected to change based on additional assignments, quizzes, and exam formats to be developed within the course.*

Level	Points	Grade for this Level
0	<200	F
1	210	D-
2	230	D
3	250	D+
4	270	C-
5	290	C
6	310	C+
7	330	B-
8	350	B
9	370	B+
10	390	A-
11	+390	A

Tentatively Planned Performance Assessments*:

6/7	~22 Point (each) Mini-Test Quizzes	~130
3	10 pt Pop Quizzes	30
1	15 pt Team Exercise	15
4	60 pt Lab Participation & Worksheets (~15 pts/lab)	60
2	20 pt Case Study & Practical Application Summaries	40
1	50 pt Final Exam	50
1	25 pt Final Practicum	25
1	40 pt Attendance & Discussion/Participatory Effort (-5 pts per unexcused absence)	40

TOTAL ASSIGNED POINTS ~390*

* Total subject to change; Levels will be adjusted proportionately with changes to final point total

***Make-up quizzes/exams will not be provided excepting extenuating circumstances.**

* Graduate students who are enrolled in PS 543 will work with Dr. K to identify additional coursework and classroom exercises as well as continue on after the mini-term ends with directed readings from current literature. See Dr. K for details about these Graduate Level course expectations.

^A Make-up quizzes/exams will not be provided excepting extenuating circumstances.

Challenge Opportunities (for Supplemental Point Accrual): Challenge opportunities (see list in separate handout) are available for points from the start of the semester. Each challenge is graded as having been achieved or not. Unless time-restricted, most challenges can be turned in at any class period during the semester, up to the final Challenge Opportunity deadline.

COURSE POLICY ON USE OF ARTIFICIAL INTELLIGENCE TECHNOLOGY

Guidelines for Acceptable Moderate Use: AI may be used in specific assignments, but not all. Students must disclose any AI assistance.

AI Policy: Permitted when Assigned in this Course with Attribution

In this course, students are permitted to use Generative AI Tools such as ChatGPT for specific assignments, as designated by, or upon permission granted by the instructor. To maintain academic integrity, students must disclose any use of AI-generated material. As always, students must properly use attributions, including in-text citations, quotations, and references.

A student should include the following statement in assignments to indicate use of a Generative AI Tool: “The author(s) would like to acknowledge the use of [Generative AI Tool Name], a language model developed by [Generative AI Tool Provider], in the preparation of this assignment. The [Generative AI Tool Name] was used in the following way(s) in this assignment [e.g., brainstorming, grammatical correction, citation, which portion of the assignment].”

COURSE ATTENDANCE AND PARTICIPATION POLICY

- Participation in each class is crucial to fulfilling class purposes. Students may not be distracted or distracting during class. Cell phones, tablets, and laptops should be used for online attendance, participation, and note taking purposes only.

Campus Closures

- If the university closes campus for any reason, including [inclement weather](#), students who are unable to attend, submit assignments, or otherwise participate in an online class session will not be penalized.

Academic Integrity:

The University Honor Statement: “An essential feature of The University of Tennessee is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty, known simply as the *university honor code*. As students of the University, you pledge that you will neither knowingly give, nor receive any inappropriate assistance in academic work, thus affirming your own personal commitment to honor and integrity.”

Therefore, academic honesty will apply in accordance with policies found in *Hilltopics*, the official student handbook of the University of Tennessee. It is available as a PDF document (<https://hilltopics/utk.edu>). Students must adhere to the principles and rules of the university and pursue academic work in a straightforward and truthful manner, free from deception or fraud.

We expect that: “An essential feature of the University of Tennessee, Knoxville is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a student of the university, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.”

University Civility Statement:

Civility is genuine respect and regard for others: politeness, consideration, tact, good manners, graciousness, cordiality, affability, amiability, and courteousness. Civility enhances academic freedom and integrity and is a prerequisite to the free exchange of ideas and knowledge in the learning community. Our community consists of students, faculty, staff, alumni, and campus visitors. Community members affect each other's well-being and have a shared interest in creating and sustaining an environment where all community members and their points of view are valued and respected. Affirming the value of each member of the university community, the campus asks that all its members adhere to the principles of civility and community adopted by the campus:
<http://civility.utk.edu/>.

Diversity Statement: Diversity enriches the educational experience by providing students with the opportunity to learn from individuals who differ from themselves. Diversity strengthens communities and the workplace by preparing students for citizenship in an increasingly complex, pluralistic society, and by fostering mutual respect and teamwork.

Disability Services: Any student who feels s/he may need an accommodation based on the impact of a disability should contact Student Disability Services in Dunford Hall, at 865-974-6087, or by video relay at, 865-622-6566, to coordinate reasonable academic accommodations.

Your Role in Improving Teaching and Learning through Course Assessment:

At UT, it is our collective responsibility to improve the state of teaching and learning. During the semester, you may be requested to assess aspects of this course either during class or at the completion of the class. You are encouraged to respond to these various forms of assessment as a means of continuing to improve the quality of the UT learning experience.

Key Campus Resources for Students:

- [Center for Career Development](#) (Career counseling and resources; HIRE-A-VOL job search system)
- [Course Catalogs](#) (Listing of academic programs, courses, and policies)
- [Hilltopics](#) (Campus and academic policies, procedures and standards of conduct)
- [OIT HelpDesk \(865\) 974-9900](#)
- [Schedule of Classes/Timetable](#)
- [Student Health Center](#) (visit the site for a list of services)
- [Student Success Center](#) (Academic support resources)
- [Undergraduate Academic Advising](#) (Advising resources, course requirements, and major guides)
- [University Libraries](#) (Access to library resources, databases, course reserves, and services)

The instructor reserves the right to revise, alter or amend this syllabus as necessary. Students will be notified in writing / email of any such changes.