

22079

PLS 2313L Economic Entomology Lab

COURSE SYLLABUS: Spring 2025

T 1:00-2:50 PSC (Plant Science Center) 101

Note: Lab will **NOT** be held January 13th 2025, the first week of the semester.

Location Note: The Plant Science Center is located at 2069 CR 4320 Campbell, TX 75422 (3.5 miles south of Commerce on Hwy 24) Please Carpool or use the Campus Shuttle, parking is limited.

INSTRUCTOR INFORMATION

Instructor: David R. Drake Ph.D. Adjunct Professor and Integrated Pest Management (IPM) Agent Texas A&M AgriLife Extension

Lab Assistant: John Lewis jlewis63@leomail.tamuc.edu

Office Location: Agronomy Lab at the Plant Science Center - 2033 CR 4320 Campbell, TX 75422 (3.5 miles south of Commerce on Hwy 24)

Office Hours: TBA or by appointment

Office Phone: 903-468-3295

University Email Address: drdrake@ag.tamu.edu or David.Drake@tamuc.edu

COURSE INFORMATION

Textbook(s) Required

Text

Entomology and Pest Management, 7th Edition

Pedigo, Larry; Rice, Marlin; Krell, Rayda

Textbook ISBN 978-1-4786-3992-3

(older editions are acceptable)

Text (Not Required)

Borror and DeLong's Introduction to the Study of Insects, 7th Edition

Norman F. Johnson; Charles A. Triplehorn Textbook ISBN-10: 0-03-096835-6

Optional Texts and/or Materials

Another insect identification manual, key, software or text of choice.

The syllabus/schedule are subject to change.

Course Description

This course introduces students to the major orders of insects and other arthropods of economic importance with specific emphasis on those beneficial and harmful to agricultural and horticultural crops, livestock, pets, and food products. Control techniques using Integrated Pest Management will be included. The Lab is concurrent to the course and serves to compliment the lectures with hands on learning.

Student Learning Outcomes

Skills:

Identify arthropods to class by inspection
Identify insects to order by inspection
Collect, process, and store insects for study

Knowledge:

Insect morphology and its use in identification of unknown specimens
Insect anatomy and physiology to understand adaptation, behavior, and resistance mechanisms
Insect life cycles and their importance in reproduction, pestilence and control
Important arthropod classes, insect orders and major family descriptions
Impact and control of major plant, animal, and human arthropod pests

COURSE REQUIREMENTS

Insect Collection

A detailed hand out will be given in lab to describe the specifics of what insects & arthropods should be collected for this assignment. There will be a minimum of 20 insects & 5 arthropods in the collection. You may have to collect more than 25 specimens to meet all requirements. Failure to submit an insect collection will result in failing grade for the course.

Insect Fact Sheet

Students will be assigned an insect/arthropod to produce a fact sheet on dependent upon major. A 1 page Fact Sheet will be made informing the general public about an insect/arthropod that is pertinent to your major. The insect will be assigned, unless the student presents the instructor with an insect idea they would like to cover instead and it is approved. Students will prepare a 5 minute presentation about their fact sheet to be presented in lab near the end of the semester.

Attendance

Attendance will be taken at the beginning of class and lab. Attendance points will be deducted for each unexcused absence. Excused absences should be discussed with the instructor before the missed class period. During this discussion plans will be made to schedule any allowed makeup work.

Quizzes

Quizzes will be given during class and lab. Quiz grades will be averaged and totaled to 100 points at the end of the semester. There will be an identification quiz at the start of every lab.

Participation

Participation grade will be based upon presence, effective listening, being active in group work and participating in any class discussion.

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GRADING

Grading Policy:

Lecture and Lab grades are combined for a single grade

Lecture Exams 450

Insect Collection 200

Insect Fact Sheet 150

Attendance 100

Quizzes 50

Lab Participation 50

Grade Distribution:

A 900-1000

B 800-899

C 700-799

D 600-699

F <600

Grades are based on the following scale:

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 59% or Below

COURSE OUTLINE / CALENDAR

Week 1	Intro to lab, Lab Safety, ID pre-test
Week 2	Household and Greenhouse Pests
Week 3	Insect Collection Equipment - Insect Anatomy
Week 4	Insect Anatomy
Week 5	Insect Identification
Week 6	Structural Pests
Week 7	Horticultural and Greenhouse Pests
Week 8	Insect damage thresholds and IPM
Week 9	Fact Sheet Presentations
Week 10	Fact Sheet Presentations
Week 11	Animal Pests
Week 12	Agricultural Field Pests

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Week 13 IPM

Week 14 Insect Collection and Identification Lab Final

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: [Netiquette](#)

<http://www.albion.com/netiquette/corerules.html>

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other

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things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: Rebecca.Tuerk@tamuc.edu

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

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PLS 2313L Lab Safety

1. The entomology lab, arthropods, insects, and the associated environments have potential risks to human safety and comfort. The risks can be greatly reduced by training, dressing appropriately, using personal protective equipment, following directions, and acting appropriately.
2. Please locate the following items for your appropriate lab space.
 - a. Restroom,
 - b. eyewash,
 - c. first aid kit,
 - d. fire extinguisher, and
 - e. other safety items.
3. Possible dangers of the entomology lab include but are not limited to:
 - a. Insects that sting and/or bite
 - b. Exposure to insect/arthropod killing and preserving chemicals
 - c. Insect/arthropod mounting pins and other insect dissection tools (sharps)
 - d. The outdoor environment with weather, water, natural terrain, animal and plant life.
 - e. Dirty, cluttered, dusty, foul smelling, decaying, dark, or physically restrictive areas with insects/arthropods
4. Training and personal protective equipment will be available during lab and students must dress appropriately for the planned lab activities.
5. On some labs/activities students may work as teams for to accommodate student comfort level with insects/arthropods.
6. Any inappropriate behavior, accident, or incident should be immediately reported to the instructor so appropriate actions administered and the incident documented.

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