

Entomology 403

URBAN ENTOMOLOGY

Spring 2014 (CRN 24257)

Lectures: Mon. & Wed 4:10-5:25 PM in Heep 102

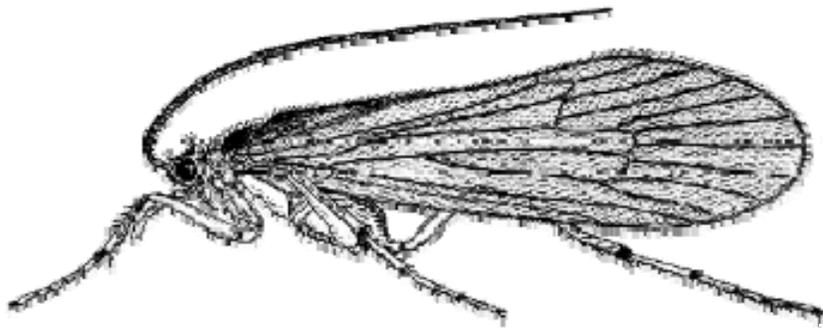
Laboratory: Mon. 5:30-8:20 PM in Heep 205

Instructor:

**Dr. Roger E. Gold
& Dr. Robert T. Puckett**

Teaching Assistants:

Cassie Schoenthal



Center for Urban and Structural Entomology

Department of Entomology

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Entomology 403: Urban Entomology

Official Syllabus

Spring 2014 (CRN 24257)

Instructors – Dr. Roger E. Gold: E-mail r-gold@tamu.edu
Cassie Schoenthal: Email schoenthal@tamu.edu
Room 102 Center for Urban and Structural Entomology
(on Agronomy across from the Vet School parking lot)

COURSE DESCRIPTION

The course will emphasize the biology and control of insects and other arthropods that commonly invade households and commercial structures and /or affect humans their companion animals. The laboratory will focus on identification of arthropod groups and species of major urban importance. There will also be special presentations and demonstrations covering topics related to urban pest problems and their control.

COURSE OBJECTIVES

The objectives will include: a) Student will be able to understanding the arthropods that can affect humans living and working in urban environments in regard to these arthropods' general biology, the damage they can cause to human structures, and other ways they can affect the health and quality of human life; b) Students will be able to identify important urban arthropod groups and species, and the damage or diseases associated with arthropods; c) Students will be able to understand the concepts of integrated pest management of arthropods in urban and structural environments; d) Students will demonstrate their abilities to do research on urban pests, prepare a written reports, and give an oral presentation; and, e) Students will improve their academic performance by completing assignments on time, attending class, participating in lectures, demonstrations and readings throughout the semester.

The course utilizes a lecture format, with outside reading assignments and projects. Demonstrations and guest lecturers will augment the lecture and reading materials.

Prerequisites

An introductory course in entomology, or with the approval of the instructors

Requirements of the Course

Attendance

Students are expected to attend and participate in all phases of this course. That includes attendance at lecture, laboratories and field trips. If a student does miss a class period, a written excuse is required within one week (7 days). Unexcused absences will be considered when calculating final grades. Attendance will be taken at the beginning of each lecture or laboratory period. If the student is not in his or her assigned seat at this time, it will be counted as an absence, even if he or she comes to class later. A seating chart will be developed to help monitor class attendance. The student must sit in their assigned seat.

Notice About All Assignments

All assignments must be turned in on time! "On time" means by the end of class, the day the project is due. If the student knows that he or she will be absent the day the project is due, it should be turned in prior to that class. Late work will be penalized at the rate of 5 points per day. Early work will be smiled upon. All work must be the original work of the student; cheating will not be tolerated. If there are questions regarding a grade on any assignment, the student should talk to the TAs or professor the same day that the assignment is returned. All assignments must be turned in to pass this course. If one assignment is missing, the student will be awarded a failing grade.

In order to take a make-up exam, the student must bring an official University excuse to the professor or the TA. These can be obtained from the Dean of the student's College, an advisor, or from Student Affairs. These are the only excuses that will be accepted.

Assignments

A semester project will be completed by each enrolled student. This project will comprise research by the students on an urban pest or an urban pest topic. The project is worth 100 points, must be typed and handed in no later than April 21, 2014. The project topic will be randomly assigned by lottery. The topics will include specific pests or topics related to urban pest concerns of the present and future. Topical emphasis should include "cutting-edge" technologies or scientific procedures used in the assigned topic. Presentations will be in a scientific paper presentation form. Presentations should be approximately 10 minutes, with time for questions and answers from the instructors and members of the class (exact time for talk and questions will be assigned by the professor and teaching assistants). The written portion of the presentation will include a PowerPoint presentation (including references) and an abstract. The format for the abstract should follow the standard of the Entomological Society of America. The presentation must include Introduction (including review of pertinent literature), Results and Discussion, and Literature Cited. Pertinent literary references must include at least 10 citations (not internet or Wikipedia). The abstract must be no longer than 1000 words. The students must also provide a copy of the abstract and presentation slides, in handout

form (i.e. 2-6 legible slides per page) for fellow class members (approx.15) and instructors (3).

Laboratory Assignments: A laboratory book should be maintained throughout the semester to include all laboratory notes, assignments and comments. When an assignment is due, it will be graded and checked off by the T.A. All notes, and calculations will be kept in this book including the setup, conduct and data from the semester project.

Examinations: Two major lecture examinations, each worth 100 points, will be given during the semester. The format of these examinations will be essay, short answer, matching and true/false. There will also be two major laboratory examinations during the semester, each worth 100 points. These examinations will be over the materials covered in the laboratory exercises including sight identifications of arthropods and their damage, and problems /calculations. An additional 100 points will be awarded for laboratory quizzes.

Grading

In order to earn a passing grade in this course, ALL assignments must be completed and submitted to the instructor. Late work will be penalized. See the “Notice About All Assignments” section for guidelines. Final grades will be calculated based on the total points earned during the semester. The instructor reserves the right to scale the grades based on class performance, absences, and extra credit assignments. A summary of the points available is as follows:

Major Lecture Examinations	200
Major Laboratory Examinations	200
Lab Quizzes	100
Semester Project	100
Total	600

Approximate Grading Scale*

- 90-100% = A
- 80-89% = B
- 70-79% = C
- 60-69% = D
- 0-59% = F (non-passing)

*Instructor may have to scale the grades

Required Text

There is no required text for this course. Recommended text books that may be checked out from Dr. Gold's office include the following:

- The Study of Insects (Borror & DeLong, 7th ed)
- Handbook of Household and Structural Insect Pests (Jones & Gold).
- Handbook of Pest Control (Mallis)
- Biology of Subterranean Termites (Forschler)
- Wood Destroying Insects (Moore)
- Structure Infesting Ants (Hedges)
- The Pesticide Book (Ware)
- Common-Sense Pest Control (Olkowski)

Course Web Page

The website is located through the Howdy Portal at: <http://ecampus.tamu.edu>
This page will give updates on what is happening in the class, recommendations for assignments, current grade reports, and links to interesting entomology pages, as well as copies of the syllabus, the lecture schedule, and reading assignments.

Guest Lecturers

From time to time during the semester, there will be guest lecturers. The students will be responsible for the information presented during these classes. There will also be a number of demonstrations, and the students will be responsible for this information.

NOTE TO STUDENTS*:

The handouts used in this course are copyrighted. By "handouts", I mean all materials generated for this class, which include, but are not limited to, syllabi, quizzes, exams, in-class materials, review sheets, and problem sets. Because these materials are copyrighted, the student does not have the right to copy the handouts, unless permission is expressly granted. The instructor has authorized NO CLASS NOTES other than those made available through this class.

If there are suggestions, comments, or problems that cannot be resolved by meeting with the instructors, please contact Dr. Pete Teel, Associate Department Head or Teaching in the Department of Entomology. Dr. Teel can be reached at 845-3253.

As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, A STUDENT IS COMMITTING PLAGIARISM IF THE WORK OF ANOTHER PERSON IS COPIED AND TURNED IN AS HIS/HER OWN, EVEN IF PERMISSION OF THAT PERSON HAS BEEN GRANTED. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. Plagiarism will not be tolerated in this course. Offenders of the plagiarism policy will be punished according to University policies that may include

being expelled from the Institution. In addition, there will be no cheating of any type tolerated in this course. All examination and quizzes will be proctored, and any cheating will result in zero (0) points for that exercise.

If there are any questions regarding plagiarism, please consult the latest issue of the *Texas A&M University Student Rules*, under the section “Scholastic Dishonesty”

*Statement from the Texas A&M University Faculty Senate-January 9, 1997.

Academic Integrity Statement

An Aggie does not lie, cheat or steal, nor tolerate those who do. This policy will be enforced on all assignments and examinations.

American Disability Act

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If a student believes he or she has a disability requiring an accommodation, he or she should contact the Dept. of Disabilities Services in Room B-118 in Cain Hall (845-1637) so that such accommodations can be made. If the student needs these services, let the instructor or the TA know before the first exam.

LAB SAFETY

The Department of Entomology is committed to the safety of all students and employees participating in teaching laboratories. To ensure that a safe environment is maintained in our teaching laboratories, it is expected that all students will adhere to general safety guidelines and emergency procedures, as well as course specific and activity-specific safety instructions provided by faculty and teaching assistants. Laboratory safety and emergency procedures will be reviewed during the first class period and on a regular basis thereafter.



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ENTOMOLOGY 403-URBAN Entomology
Schedule of Lectures
 Spring Semester 2014 (CRN 242257)
 Lecture Heep 102 from 4:10-5:25 (Mon-Wed)
 Laboratory Heep 205 Center from 5:30-8:20PM (Mon)

Instructors: Dr. Roger E. Gold & Dr. Robert T. Puckett
TA: Cassie Schoenthal

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845-5855
FAX: 845-5926
E-Mail: r-gold@tamu.edu

Day	Date	Lec. #	Lab #	Topic
Mon	1/13/14	1		Introduction to Urban & Structural Entomology
Mon	1/13/14		1	Introduction to Arthropoda
Wed	1/15/14	2		Overview of Urban Environments
Mon	1/20/14			No class- Martin Luther King Jr. Day
Wed	1/22/14	3		Urban IPM Strategies & Population Dynamics
Mon	1/27/14	4		Introduction to Cockroaches
Mon	1/27/14		2	Identification of Cockroaches
Wed	1/29/14	5		Cockroach Biology & Control
Mon	2/3/14	6		Introduction to Termites
Mon	2/3/14		3	Identification of Termites & Their Damage
Wed	2/5/14	7		Termite Biology & Control
Mon	2/10/14	8		Introduction to Hymenoptera
Mon	2/10/14		4	Field trip to the Termite Training School Site, (Riverside campus) - Dr. Robert Puckett
Wed	2/12/14	9		Introduction to Bees & Wasps
Mon	2/17/14	10		Ant Biology & Control
Mon	2/17/14		5	Identification of Hymenoptera
Wed	2/19/14	11		Introduction to Wood Destroying Beetles
Mon	2/24/14	12		Coleoptera Biology & Control

Mon	2/24/14		6	Demonstration of Fumigation Technology & Beetle Identification – Mr. Bryan Springer
Wed	2/26/14	13		Introduction to Fabric Pests & Their Control
Mon	3/3/14	14		Lecture & Exam 1 Review
Mon	3/3/14		7	1st LABORATORY EXAM (100 PTS)
Wed	3/5/14			1st MAJOR EXAM (100 PTS)
Mon	3/10/14			spring break
Wed	3/12/14			spring break
Mon	3/17/14	15		Identification & Control of Spiders
Mon	3/17/14		8	ID of Spiders, Fabric Pests, Lice & Bed Bugs
Wed	3/19/14	16		Introduction & Control of Lice, Bed Bugs, & Siphonaptera
Mon	3/24/14	17		Introduction to Diptera
Mon	3/24/14		9	Structural Pest Control Laws & Certification & Urban Pest Management as a Career – Dr. Janis Reed
Wed	3/26/14	18		Fly & Mosquito Biology & Control
Mon	3/31/14	19		Introduction to Stored Product Pests
Mon	3/31/14		10	Diptera ID & Stored Product Pests
Wed	4/2/14	20		Stored Product Pests Biology & Control
Mon	4/7/14	21		Pesticides Introduction to Ticks & Mites
Mon	4/7/14		11	Pesticide Application Technology & Safety
Wed	4/9/14	22		Pesticides
Mon	4/14/14	23		Toxicology & Insect Resistance to Pesticides
Mon	4/14/14		12	Toxicology & Bioassays
Wed	4/16/14	24		Introduction to Ticks & Mites
Mon	4/21/14	25		Non-Chemical Control Strategies
Mon	4/21/14		13	SEMESTER PROJECTS DUE (Abstracts & Power Points)
Wed	4/23/14	26		Class Project Oral Presentations (all students must attend)
Mon	4/28/14	27		Lecture & Final Exam Review
Mon	4/28/14		14	LABORATORY FINAL EXAM (100 PTS)
Wed	4/30/13			No class
Mon	5/5/14			FINAL EXAM (100 PTS): 3:30-5:30pm

* ORIGINAL WORK BY THE STUDENT (NO PLAGIARISM WILL BE TOLERATED)

**EXAMINATIONS WILL BE PROCTORED (THERE IS “0” TOLERANCE FOR CHEATING)