

Entomology 4000/6000 General Entomology

Monday, Wednesday 10:10-11:00 AM

Friday, 10:10-12:05 PM

Instructor: Michael R. Strand

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Teaching Assistant: Joe Williamson, 518 Biological Sciences, jrwmojo@uga.edu

1. Introduction, why study insects?
2. Arthropod classification
3. Insect diversity
4. Insect integument and organ systems
5. Insect development and reproduction
6. Sociality
7. Plant-insect interactions
8. Entomophagous insects
9. Insect-microbial interactions
10. Insect-vertebrate interactions
11. Insects and agriculture

Course objectives

The educational goal of the course is to acquaint you with insects. We want you to become familiar with the insects that annoy you, eat your food, and transmit diseases. We also want you, as a consumer of agricultural products, to know what demands you are making on farmers, and how these demands influence the environment. But perhaps most importantly of all, we want you to gain an appreciation of the incredible diversity of the insect world. Many insects are pests that adversely affect man, but just as many others are beneficial or possess unique biological characteristics. If, ten years from now you can still tell the difference between a spider and an insect, have an understanding of the ever present dangers of insect borne diseases, and understand the difficulties and problems associated with insect control, then I will have fulfilled my role in expanding your awareness of just how important insects are to humankind.

Where can you find me and what about reading material?

My office is in 420 Biological Sciences. Regular office hours will be from 1:00-2:00 M-F. If this is not convenient, please do not hesitate to see me; we can always arrange another meeting time. There is no text book for the course. Class notes will be supplemented with handouts, and information available on WebCT. Class notes will also be available on the WebCT.

Laboratory

The main purpose of the laboratory is to acquaint you with how to recognize the major orders and families of insects. In addition, some time will also be devoted to introducing you to insect morphology. Developing some basic taxonomic knowledge is essential to appreciating the wonderful diversity and biology of insects. It also is

important that you be able to recognize key characteristics of the insect body plan and how it compares and contrasts to other major animal groups like vertebrates.

Grading

Getting and giving grades is rough on both students and instructors. Unfortunately, it is the nature of the system that grades must be given.

Grades will be based on the following items:

1. Lecture Exams (3)
2. Rearing Project (1)
3. Laboratory Exams (2)
4. Insect Collection (1)

Lecture Exams

There will be three lecture exams, each worth 100 points. Exams will be given in class and will test your knowledge of the material presented during the lecture portion of the class. The first two lecture exams will be given during the semester while the third will serve as the final exam for the course. Students registered for ENT 6000 will have additional take home questions on the first two exams. These questions will involve outside reading to develop an essay-type answer.

Rearing Project

You will be given a representative species of insect to rear to adulthood at home. The purpose of this exercise is for you to observe different life stages of insects and how insects molt. The write-up for this project will be worth a total of 50 points. Details on how this exercise is to be conducted and how you are to present your results will be presented in laboratory.

Laboratory Exams

There will be a two laboratory exams worth 50 points. These exams will test your knowledge of the material presented in the laboratory during the course of the semester.

Insect Collection

You will be required to make an insect collection that will be turned in for grading at the end of the semester. This collection will be worth a total of 100 points. Details on collection requirements and grading will be presented in laboratory.

Grading Policies

First, a review of point values for each required item in the course:

ITEM	Maximum Point Value	
	Ent 4000	Ent 6000
Lecture Exam 1	100	125
Lecture Exam 2	100	125
Lecture Final (Exam 3)	100	100
Insect Rearing Project	50	50
Laboratory Exam 1	50	50
Laboratory Exam 2	50	50
Insect Collection	100	100
TOTAL	550	600

Hypothetical Student's Scores

ITEM	
Lecture Exam 1	80
Lecture Exam 2	85
Final Exam 3	85
Insect Rearing Project	42
Laboratory Exam 1	45
Laboratory Exam 2	48
Insect Collection	90
TOTAL	475

Calculating a Grade

1. Add total points accumulated and divide by 550 (the maximum possible number of points) and convert to a percentage.

2. Calculate grade, based on percentage distribution presented below

**In the example above, the student had 475/550 points, which is rounded to 86%.
This is a "B"**

Table for Finals Grades

Course Percentage

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	<60%

We do not curve in this course.

ENT 4000/6000, Fall 2006
Laboratory Syllabus

Your TA: Joe Williamson

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|----------------|---|
| Aug. 18 | 1. Collecting and mounting techniques. Hand out equipment |
| Aug. 25 | 2. Field Trip. Field collecting methods. |
| Sept. 1 | 3. Insect anatomy |
| Sept. 8 | 4. Using taxonomic keys. Collembola, Diplura, Thysanura, Ephemeroptera |
| Sept. 15 | 5. Odonata, Blattodea, Mantodea, Isoptera, and Plecoptera |
| Sept. 22 | 6. Hand out materials for insect rearing.
Dermaptera, Orthoptera, Phasmida, Phthiraptera |
| Sept. 29 | 7. Hemiptera and Neuroptera |
| Oct. 6 | 8. Coleoptera |
| Oct. 13 | 9. Lab Exam I |
| Oct. 20 | 10. Diptera |
| Oct. 27 | No class, fall break |
| Nov. 3 | 11. Lepidoptera and Syphonaptera |
| Nov. 10 | 12. Hymenoptera |
| Nov. 17 | 13. Hymenoptera and Review |
| Nov. 24 | No class, Thanksgiving |
| Dec. 1 | Lab Exam II. Collection due before exam. |