

Syllabus: Entomology 818

Insect ID and Natural History

Summer 2009

Instructors:

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Office Hours The best way to reach me (Tom) is by email or text to my mobile. Expect a response within a few hours, although I sometimes take a little longer. If you call and I do not answer, leave a message and I will get back to you as soon as possible. Calls at home are fine up until about 10 pm central time. I am on the computer a lot so we can also arrange chat times if you wish.

ABOUT THE COURSE

This course is designed to introduce graduate students to the diversity and advanced biology of insects as well as explore their classification beyond the order level. The natural history of all orders will be discussed and key taxonomic characters of the major/common families will be explored. A collection is required.

COURSE OBJECTIVES

All students will be expected to:

1. Identify to **Order**, at sight, any common insect
2. Identify to **Family**, at sight and with the aid of keys, several members of common **Orders**
3. Correctly spell all **Family** names
4. For each taxon discussed in lecture:
 - a. name host, or habitat of adults
 - b. describe the general life history
 - c. name, or describe, any unusual characteristics shared with other taxa
 - d. name taxa which share similar biological or morphological features
5. Define terms used in biology and taxonomy
6. Properly collect, preserve, and curate insects

INSTRUCTIONAL METHOD

Blackboard will be used for delivery of all materials pertinent to this course (lectures, asynchronous discussions, assignments, and assessment materials). Power Point presentations will be used to deliver lectures which will include text and images and will be strengthened by narration to emphasize

key points. Asynchronous discussion threads will be used to assess student comprehension of lecture and reading materials.

TEXTBOOKS

Borror and Delongs: Introduction to the study of insects....7th ed.

Recommended... Borror and White, Peterson Field Guides: A Field Guide to Insects, America North of Mexico.1970

THE COLLECTION

Students will collect a minimum of 100 ADULT insects. The collection must contain specimens representing 15 orders and 75 different families. Specimens must be properly labeled, preserved, and curated. **See additional posted information.**

STUDENT ASSIGNMENTS AND EXAMS

Exams: There will be two examinations (midterm and final), both of which will be open book, and each worth 100 points. Exams will be delivered by email and should be returned by email. Question formats will include definitions, short answer and essays.

Due Dates: Midterm: Due June 17, 2009 and Final Exam: July 14, 2009

Weekly Review and Quiz: At the end of each week, you will review the orders and families we have gone over. Following this, you will take a quiz to assess your sight identification skills. Each will be worth 25 points

Due Dates: May 25, June 1, 8, 15, 22, 29, July 6, 13, 2009

Dichotomous Key Exercises: We will conduct two exercises where each student will have access to photos of an insect, along with the key features that will help you run it through a dichotomous key. This exercise will strengthen the student's ability to identify insects to family level. Each exercise will be worth 50 points.

Due Dates: Exercise 1, June 5: Exercise 2, June 19, 2009

Point Breakdown

Midterm Exam	100 points
Final Exam	100 points
Weekly Review and Quiz	175 points
Dichotomous Key Exercises	100 points
Collection	250 points
Total	725 points

Letter grades will be assigned based on straight percentages of 100 - 90% A range, 89 - 80% B ranges, etc. The department of entomology requires that graduate students must receive a **B or better grade** in order for the class to count towards graduation.

SCALE

100 – 98 A+	89 - 87 B+
97 – 94 A	86 - 83 B
93 – 90 A-	82 - 80 B-

Tentative Lecture Schedule

Lecture	Date	Topic
-	-	Course Overview
Week 1		
1	May 18	Classification, Phylogeny, Nomenclature
2	May 19	Morphology
3	May 19/20	Collecting and curating
4	May 20	Using a dichotomous key
5	May 21	Protura
6	May 21	Collembola
7	May 21	Diplura
8	May 22	Microcoryphia
9	May 22	Thysanura
Week 2		
10	May 26	Ephemeroptera
11	May 27	Odonata
12	May 28	Orthoptera
13	May 29	Phasmatodea
14	May 29	Grylloblattodea

Week 3		
15	June 1	Dermaptera
16	June 1	Plecoptera
17	June 1	Embiidina
18	June 1	Zoraptera
19	June 2	Isoptera
20	June 2	Mantodea
21	June 3	Blattodea
22	June 4-9	Hemiptera
Week 4		
23	June 10	Thysanoptera
24	June 10	Phthiraptera
25	June 11	Coleoptera
Week 5		
26	June 18	Neuroptera
27	June 18	Hymenoptera
Week 6		
28	June 24	Trichoptera
29	June 24	Lepidoptera
Week 7		
30	June 30	Siphonaptera
31	June 30	Mecoptera
32	June 30	Strepsiptera
33	June 30	Diptera
Week 8		
		Review

ADA STATEMENT:

Students with disabilities are encouraged to contact Christy Horn for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY (updated 8/20/07)

CHEATING:

The University of Nebraska-Lincoln has a policy about academic dishonesty, as indicated in the Student Code of Conduct (see Undergraduate Bulletin). As a student at UNL, you enjoy rights and protections under the code and are obligated to conduct yourself in compliance with the code.

As the Student Code of Conduct indicates, academic sanctions for misconduct subject to appeal are at the discretion of the instructor, and may include giving the student a failing grade for the course. In this course, the least penalty that will be imposed for misconduct is a one letter grade reduction in the course grade, but in most instances the penalty for cheating will be a failing grade in the course.