

Sample Syllabus: Entomology 819

Insect Behavior

Instructor:

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Office Hours The best way to reach me 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 9 pm central time. I am on the computer a lot so we can also arrange chat times if you wish....just ask!

ABOUT THE COURSE

Behavior can be defined as the response of an organism to adapt or adjust to different internal and external stimuli. In other words....it is what an animal does, and behavioral study is an attempt to learn how it does it. The process of behavioral study involves investigating the relationship between animals and their surroundings, and their response to their kin and to other organisms. Topics include characterizing how animals find and defend their resources, how they avoid predators, how they find mates, how they mate, and how some exist in highly ordered social settings. In addition to viewing lectures, students will participate in discussions related to insect behavior and will be active in the field, observing insects and characterizing their behavior.

COURSE OBJECTIVES

After completing the course, you will be able to:

- 1) Understand the basic concepts that ultimately define insect behavior
- 2) Understand the principle external and internal processes that dictate insect behavior
- 3) Understand the relationship of an insect's behavior to its habitat and other organisms.
- 4) Use scientific resources to strengthen your knowledge and to learn more about insect behavior.
- 5) Understand the approaches used in laboratory and field settings to observe and characterize insect behavior.

INSTRUCTIONAL METHOD

Blackboard will be used for delivery of all materials pertinent to this course (lectures, asynchronous discussions, assignments such as readings or links to readings, 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. In addition, readings will be assigned. Each student is expected to take good lecture notes and to complete all reading assignments. Items covered in lectures,

but not covered in the assigned readings or handouts are fair game for examination material. Further, all reading material will not be discussed in class lectures, but the student is still responsible for being familiar with these parts of the assignments. Asynchronous discussion threads will be used to enhance student comprehension of lecture and reading materials. It is expected that in a discussion format, all students will participate with original inputs.

TEXTBOOKS

THERE ARE NO REQUIRED TEXT BOOKS.....readings or links to readings will be posted on Blackboard.

STUDENT ASSIGNMENTS AND EXAMS

Weekly Assessments: There will be weekly quizzes emailed to you every Friday starting this Friday, August 28. All quizzes will be open book, and worth 25 points each. Quizzes will be due the Wednesday after you receive them. Question formats will include definitions, short answer and essays.

Final Exam: A comprehensive final exam will be emailed to you on December 10. It is due Dec. 16. It will be worth 100 points.

Field Observation Summaries: Its fall, I would like to get each of you outside doing some observational work on insects and present your results in a journal type format. The pertinent details related to this assignment will be posted well in advance of the first due date. If you live way up north....get out soon and do your observations. Even though you may collect you data early in the semester, I have spread out the due dates.

There will be 3 summaries and each will be worth 100 points. I will provide an example.

Due Dates: Summary 1, September 14: Summary 2, October 12: Summary 3, Nov. 23, 2015

Point Breakdown

Quizzes (x14)	350 points
Final Exam	100 points
Field Observation Summaries	300 points
Total	750 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 (I will be revising some lectures so this may change)

Lecture		Topic
-		Course Overview
Module 1: The Study of Insect Behavior		
1		Introduction to the study of insect behavior
2		Research and experimentation (tools and methods)
3		Analysis of insect behavior
Module 2: Mechanisms of Insect Behavior		
4		Sensory perception of insects
5		Control of insect behavior: genetic
6		Control of insect behavior: neural
7		Control of insect behavior: physiological
8		Control of insect behavior: environmental (biological rhythms)
9		Development of behavior/learning and learned behavior
Module 3: Behavior and the Environment		
10		Orientation
11		Migration and navigation
12		Resource partitioning and territoriality
Module 4: Communication		
13		Chemical
14		Acoustic and tactile
15		Visual
Module 5: Foraging and Not Being Foraged On		
16		Herbivores
17		Predators
18		Parasitoids

19		Predator/Parasitoid avoidance
Module 6: Reproductive Behavior		
20		Mate finding and selection
21		Mate competition
22		Parental care
Module 7: Social Behavior		
23		Cooperative living and altruism
24		Aggressive Behavior
25		
Module 8: Insect Behavior and Pest Management		
26		Sampling and monitoring
27		Control of pests
Module 9: Wrapping it up		
29		Reviewing key concepts
30		A look at some really bizarre animal behaviors

About the Discussion Board:

I use the discussion board area of blackboard frequently. On it I post scenarios, interesting articles or papers, and questions. Participation is not mandatory, but is definitely appreciated. However, exam questions may be generated from some of the discussion.

In addition, I will provide you with an open forum where you can ask questions, or chat with you peers.

Additional Information:

PLEDGE OF INSTRUCTIONAL STANDARDS

Entomology instructors will provide our students a complete syllabus meeting all UNL standards, our classes will be based on current science and will follow published schedules and descriptions, and our instructors will be timely in returning grades and in responding to our students.

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)

ACADEMIC HONESTY

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.

“Students are expected to adhere to guidelines concerning academic dishonesty as specified in Entomology policy (insert web link) in accordance with Section 4.2 of the University Student Code of Conduct (<http://stuafs.unl.edu/ja/code/>).”

INFORMATION FOR EMERGENCY RESPONSES: Fire Alarm (or other evacuation)

In the event of a fire alarm: Gather belongings (Purse, keys, cellphone, N-Card, etc.) and use the nearest exit to leave the building. Do not use the elevators. After exiting notify emergency personnel of the location of persons unable to exit the building. Do not return to building unless told to do so by emergency personnel.

Tornado Warning: When sirens sound, move to the lowest interior area of building or designated shelter. Stay away from windows and stay near an inside wall when possible.

Active Shooter Evacuate: if there is a safe escape path, leave belongings behind, keep hands visible and follow police officer instructions. **Hide out:** If evacuation is impossible secure yourself in your space by turning out lights, closing blinds and barricading doors if possible. **Take action:** As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter.

UNL Alert: Notifications about serious incidents on campus are sent via text message, email, unl.edu website, and social media. For more information go to: <http://unlalert.unl.edu>. Additional Emergency Procedures can be found here: http://emergency.unl.edu/doc/Emergency_Procedures_Quicklist.pdf