

Spring 2020 BIOL-6750-004 Syllabus

BIOL 6750-004

Insect Behavior

Course Description

The study of behavior involves investigations of the relationship between animals and their surroundings, and their response to their kin and to other organisms. Course topics will include characterizing how insects and other 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.

Course Objectives

By the end of this course, you will be able to:

1. Understand basic concepts in the major components of insect/animal behavior, and how behavior is studied
2. Organize and deliver presentations on topics in insect/animal behavior
3. Critically review and discuss primary literature on topics in insect behavior
4. Discuss examples illustrating the concepts of behavior in insects

Instructors

Dr. James P. Pitts; Geol 301; (435) 797-8872; james.pitts@usu.edu (mailto:james.pitts@usu.edu); Office hours:

Dr. Carol von Dohlen; BNR 353, carol.vondohlen@usu.edu (mailto:carol.vondohlen@usu.edu); Office hours:

Course Resources

Text: Animal Behavior, 11th ed., by D. Rubenstein and John Alcock, Sinauer Pub. ~\$92

Use promo code **Asai2019** to receive a 20% discount off order directly from Oxford University Press. Ebook is available for \$54.95 ISBN 9781605357706 via *Redshelf, VitalSource, Chegg*

Course Requirements

Class time: The first meeting of the week will be devoted to presentations, discussion of the assigned textbook chapter and its discussion questions. The second meeting of the week will continue discussion of the chapter and any assigned insect-related articles.

Presentations: Each student will give in-class lectures and lead class discussions for a specific chapter of the text. For each chapter, the presenter will be given (a) a PowerPoint file with all figures for the chapter, and (b) a set of discussion questions on that chapter. The presenter's job is to modify the slide show by adding text, etc. The presenter will use this slide show and discussion questions to lead a discussion of the chapter.

The course instructors will assign papers from the primary literature to read and discuss in the second class period for the week. The presenter of the week also will lead the discussion of these papers.

Participation: All students are expected to participate in discussion of chapter discussion questions and assigned papers.

Quizzes: To ensure that you have read the chapter and the assigned primary literature, a short quiz will be given via Canvas prior to each class period. The quiz for the discussion class will constitute contributing questions for discussion. All chapter quizzes are open book.

Evaluation Methods and Criteria

Your grade will be based on quizzes, presentations, and class participation. The point distribution is shown in the table below. The dates of all assignments are given in the calendar for the course.

Category	Percent
Presentations	75%
Quizzes	15%
Class Participation	10%

Grade Scheme

The following grading standards will be used in this class:

Grade	Range
A	100 % to 93.0%
A-	< 93.0 % to 90.0%
B+	< 90.0 % to 87.0%
B	< 87.0 % to 83.0%
B-	< 83.0 % to 80.0%
C+	< 80.0 % to 77.0%
C	< 77.0 % to 73.0%

Grade	Range
C-	< 73.0 % to 70.0%
D+	< 70.0 % to 67.0%
D	< 67.0 % to 60.0%
F	< 59.0 % to 0.0%

Course Schedule/Outline

Date	Topic & Reading Assignments	Leader
Jan 6	Organizational Meeting	
Jan 8	Chapter 1: An Introduction to Animal Behavior	Pitts & von Dohlen
Jan 13, 15	Chapter 2: Integrative Study of Behavior	Desiree
Jan 20	MLK holiday	
Jan 22, 27	Chapter 3: The Developmental and Genetic Bases of Behavior	Brandon
Jan 29, Feb 3	Chapter 4: The Neural Basis of Behavior	Alan
Feb 5, 10	Chapter 5: The Physiological Basis of Behavior	Desiree
Feb 12	Chapter 6: Avoiding Predators and Finding Food	Alan
Feb 17	President's Day holiday	

Feb 19	Chapter 6, cont.	Alan
Feb 24, 26	Chapter 7: Territoriality and Migration	Alan
Mar 2,4	Spring Break	
Mar 9, 11	Chapter 8: Principles of Communication	Brandon
Mar 16, 18	Watch movie Secret Weapons	
Mar 23, 25	Chapter 9: Reproductive Behavior	Alan
Mar 30, Apr 1	Chapter 10: Mating Systems	Desiree
Apr 6, 8	Chapter 11: Parental Care	Brandon
Apr 13, 15	Chapter 12: Principles of Social Evolution	Brandon
Apr 20	Chapter 13: Social Behavior and Sociality	Desiree
Apr 23- 29	Finals Week	

Attendance and Excused Absences Policy

Attendance is not mandatory, but if you are not in class you can't participate and you will not receive points. Instructors should be notified in advance for excused absences.

Academic Integrity – "The Honor System"

Each student has the right and duty to pursue his or her academic experience free of dishonesty. To enhance the learning environment at Utah State University and to develop student academic integrity, each student agrees to the following Honor Pledge:

"I pledge, on my honor, to conduct myself with the foremost level of academic integrity."

A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;

- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.

Withdrawal Policy and "I" Grade Policy

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The term 'extenuating' circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor. See Adding and Dropping Classes (<https://www.usu.edu/registrar/registration/after/add-drop>) for more information.

Disability Statement

USU welcomes students with disabilities. If you have, or suspect you may have, a physical, mental health, or learning disability that may require accommodations in this course, please contact the Disability Resource Center (DRC) as early in the semester as possible (University Inn # 101, 435-797-2444, drc@usu.edu). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.