

Instructor: Dr. Todd Blackledge

Office: 276 ASEC-W

Phone: 972-7264

Email: Blackledge@uakron.edu

Office hours: Monday 9-10:45am, Wednesday 2-3pm, or by appointment

Time & Location (2+1 credit hours) M, W & F 11:00-11:50 in Olin 129

Course Objectives: All of us have spent our lives observing the behavior of a variety of animals, from our pets to our friends and even ourselves. This course will provide you with an introduction to basic principals and questions of animal behavior and to how biologists study behavior. During the semester we will examine the sensory and neural bases for behaviors, the ultimate causation of behaviors, and social behavior. Throughout the course we will take an evolutionary approach to develop an understanding of behavior.

Course Layout: You will attend three 50 minute lectures each week. In addition, you will develop your critical thinking skills through a series of problem sets regarding animal behavior topics. Graduate students enrolled in Biology 528 will also be expected to complete an in depth review paper of a current “hot” topic in animal behavior, emphasizing experimental testing of hypotheses. Graduate students will give in class presentations on their chosen research topic during the final week of class.

Text

Alcock, J. 2001. *Animal Behavior: An Evolutionary Approach 7th edition*. Sinauer Associates.

Our text tends to emphasize an evolutionary approach to behavior. We will supplement the text with additional readings from the current primary literature, especially for class discussions throughout the semester. These reserve readings will be handed out during lecture.

Approximate grading scale

<u>Assignment</u>	<u>Points</u>	
Field observation project	10	
-follow up questions	30	(2 at 15 points each)
Discussion (problem set & participation)	60	(4 at 15 points each)
Midterm 1	100	
Midterm 2	100	
Final	150	
*grad student paper & mini-lectures	*50	(25 points each)

* for graduate students in 528 only

Tentative Lecture Schedule (May change to accommodate guest lecturers & student needs)

Week	Topic	Readings
W Jan 19	Introduction	
F Jan 21	Field observation project I – due Jan 26	
M Jan 24	Questions about behavior	1
W Jan 26	Proximate and ultimate causes of behavior	2
F Jan 28		
M Jan 31	Nature vs nurture: heredity	3
W Feb 2		
F Feb 4	Nature vs nurture: environment	4
M Feb 7		
W Feb 9	Neural & hormonal basis of behavior	5 & 6
F Feb 11	Field observation project II - follow up questions due	
M Feb 14		
W Feb 16	Discussion – neural constraint in human behavior	Reserve readings
F Feb 18	Exam 1	
M Feb 21	Antipredator behavior	7
W Feb 23		
F Feb 25	Foraging behavior	8
M Feb 28		
W Mar 2		
F Mar 4	Case Study: Why do spiders decorate their webs?	Reserve readings
M Mar 7	Discussion – predation risk and the need to eat	Reserve readings
W Mar 9	Habitat selection and territoriality	9
F Mar 11		
M Mar 14	Communication	10
W Mar 16		
F Mar 18	Exam prep questions due (replaces field obsrv. III)	
M Mar 21	Reproductive behavior *Draft case study paper due	
W Mar 23		11
F Mar 25	Exam 2	
M Mar 28	**no class** Spring break!	
W Mar 30	**no class** Spring break!	
F Apr 1	**no class** Spring break!	
M Apr 4	Mating systems	12
W Apr 6		
F Apr 8	Discussion – sexual conflict	Reserve readings
M Apr 11	Parental care	13
W Apr 13		
F Apr 15		
M Apr 18	Social behavior	14
W Apr 20		
F Apr 22	*Final case study paper due	
M Apr 25	Discussion – comparing human and insect societies	
W Apr 27	Behavior as a tool in conservation	Reserve readings
F Apr 29	*Case studies: Graduate student presentations	
M May 2	Human behavior	15
W May 4		
F May 6	Exam preparation	
May9-13	Final Exam	

* Graduate students in 528 only

Field Observation

Your first assignment will require you to spend time observing an animal. Its winter so this may take some creative thinking on your part. But, it is an important assignment that we will utilize for the rest of the semester.

Discussions

We will have a number of in class discussions throughout the semester. One week prior to each discussion, I will hand out any relevant readings and a problem set. The problem set is due at the beginning of the discussion period and is designed to get you thinking about the material *before* class.

Graduate student case studies

Graduate students enrolled in 528 will be required to undergo an in depth case study on a “hot” topic in behavioral research. This study will culminate in a 5-15 page review paper on the topic and a 30 minute lecture presentation to the class. This lecture should provide a case study that emphasizes current research on a topic within behavioral biology. The review paper and the lecture are both worth 25 points of your final grade.

Attendance

Your success is directly related to class attendance and participation. You are expected to attend all classes on time. We have a lot to cover so missing even one class means that you’ll miss out on entire subject areas. All graded exercises are due at the beginning of the class on which they are assigned. Exams will be administered on the dates in the syllabus or as amended in lecture and must be taken during the assigned period, unless you have an excellent excuse.

Academic integrity

You are expected to abide by University of Akron’s code for academic conduct. All assignments are to be completed on your own, unless they state otherwise. Also, you should be aware that plagiarism includes copying not just someone else’s words but also their *ideas*. Giving credit where credit is due and properly citing the literature are fundamental to communication in the sciences. So don’t just change a few words from someone else’s work in the belief that it is now your “own”.