

Psychology 335, Fall 2011
Introduction to Animal Behavior

Lecture: Tue & Thu 2:30-4:00 PM, East Hall Auditorium (1324)
Professor: Dr. Thore Bergman
Email: thore@umich.edu
Office: 3014 East Hall
Phone: 734-615-3744
Office Hours: Wed, 2:30-4:30 PM, or by appointment

Discussion Sections:

Section 2*	Monday	11:00AM-12:00 PM	373 Lorch
Section 3*	Monday	12:00-1:00 PM	373 Lorch
Section 4*	Monday	5:00-6:00 PM	229 Dennison
Section 5*	Monday	3:00-4:00 PM	1084 East Hall
Section 6	Thursday	5:00-6:00 PM	<u>4437 East Hall</u>
Section 7	Friday	10:00-11:00 AM	4096 East Hall
Section 8	Friday	9:00-10:00 AM	2866 East Hall
Section 9	Friday	12:00-1:00 PM	120 Dennison
Section 10	Friday	1:00-2:00 PM	1096 East Hall

*Note that Monday sections will cover the activity from the previous week.

GSIs: Lucy Ho (wimsey@umich.edu) Sections 4, 5, 10
Aimee Massey (masseyal@umich.edu) Sections 2, 3, 9
Eila Roberts (ekrobert@umich.edu) Sections 6, 7, 8

Readings: J. Alcock. Animal Behavior, 9th edition, 2009.
Additional articles posted on the CTools site.

Course Description

This course is an introduction to the evolutionary study of Animal Behavior. This class will provide an opportunity for students to learn about behavior from a biological perspective. We will start by reviewing evolution and natural selection. The remainder of the course looks at why animals behave the way they do in nature, focusing on causes of behavior. We will address immediate (or “proximate”) causes of behavior including genetic, neural, and hormonal influences on behavior. However, the main emphasis of the course will be on “ultimate” (or long-term) causes of behavior. Thus, we will look at behavior primarily in relation to an animal’s fitness or success. Topics covered will include foraging, habitat selection, mating systems, sexual selection, communication, and cognition. Emphasis will also be on learning how scientists study behavioral questions, including how to test adaptive hypotheses.

CTools

It is critical that you check for announcements on the CTools website at least several times a week as this is the primary way that I will communicate with you regarding assignments and class material.

Grades:

Exams (25% each, best 2 of 3 count):	50%
Ethogram project/poster presentation	30%
Discussion quizzes	10%
Discussion contribution	10%

There will be 3 exams: **YOU CAN DROP ONE EXAM** (only your 2 best scores count). Exams will consist of multiple choice, short answer, and short essay questions. There will also be two multiple-choice quizzes (in discussion). The ethogram project involves coming up with an original research question about behavior, observing an animal and constructing a catalogue of behaviors (an ethogram), and presenting a poster on your project. You will be graded on and receive feedback at several stages prior to the poster presentation. The goals of the project are 1) for students to demonstrate the ability to formulate testable predictions about behavior, 2) to gain experience observing animals and quantifying behavior, and 3) to gain experience with scientific presentations. The grading scale for the class is absolute, not based on a predetermined number of A's, B's, C's, etc. If everyone receives 90% or better, everyone will receive an A (and I hope this happens!).

Illness, late, or missing assignments

If you miss an exam because of illness, the professor or teaching assistant should be notified prior to the test, and a note brought from the health clinic. If a make-up quiz or exam is necessary, it will be more difficult than the original exam.

The due dates for written assignments are final. Unless prior approval is given, late assignments will have 10% of the total points deducted for each late day.

Each assignment should have your name and discussion section on the front page.

Special needs

If you have special needs or concerns related to exams, written assignments or lectures please see me during the first or second week of the term so we can make appropriate arrangements.

Lecture format:

Although this is a very large and full class, I encourage you all to ask questions and be active participants in the lecture. While I encourage questions and comments, I also expect you not to disturb other students. If you are unable to remain quiet during lecture then please stay home. I will be lecturing primarily using PowerPoint slides and videos.

Discussion:

Attendance will be taken at discussion sections. The discussion sections will give you valuable opportunities to participate in activities and discuss in detail lecture material, readings, and videos in a smaller class setting. There will be a grade for participation in the discussion component of the class. Additionally, assignments will be explained/reviewed in detail during discussion. Please plan to attend only the section for which you are registered to keep section sizes manageable.

Course schedule (subject to change)

Please check the CTools site regularly for updates.

A=Alcock's textbook *Animal Behavior* ("A1"=chapter 1 in Alcock).

Date	Day	Lecture Topic	Reading	Discussion "Week" and Topic		
September	6	Tue	Introduction, Syllabus, Proximate/Ulimate causes of behavior	A1	Note: Sections will meet the first week	
	8	Thu	Evolution, Natural Selection and Behavior	A1	1	"Register" and Natural Selection
	13	Tue	Natural Selection, Behavior, Adaptation	A2, A6: 183-195		
	15	Thu	Inclusive Fitness, Kin selection, altruism	A13:457-488	2	Kin Selection
	20	Tue	Development	A3		
	22	Thu	Behavioral genetics	A3	3	Quiz on Evolution
	27	Tue	Neural influences on behavior	A4		Scientific Method
	29	Thu	Hormonal influences on behavior	A5	4	Project introduction/How to study behavior
	4	Tue	EXAM 1			
October	6	Thu	Survival, Predator-Prey interactions	A6:196-217	5	Predator-Prey interactions
	11	Tue	Foraging	A7		DUE Electronically: Project Topic
	13	Thu	Habitat Selection, migration	A8	6	No Discussion, GSIs return Topics electronically
	18	Tue	FALL BREAK			
	20	Thu	Mating systems	A11	7	Mating systems
	22	SAT	ZOO TRIP (Optional)			
	25	Tue	Mating systems	A11		
	27	Thu	Reproduction	A10	8	Quiz on Mating

Date	Day	Lecture Topic	Reading	Discussion Week and Topic		
				8	Quiz on Mating	
					Socio-ecological Model Review	
November	1	Tue	Parental care	A12	9	Sexual Selection and Poster workshop
	3	Thu	Sexual selection and competition for mates	A10		
	8	Tue	EXAM 2			
	10	Thu	Sexual selection and signaling	TBA	10	Scientific Debate: Infanticide
	15	Tue	Communication	A9		
	17	Thu	Communication and language	A9	11	Poster Session I
	22	Tue	Social behavior	A13		
	24	Thu	Thanksgiving		12	No Discussion
	29	Tue	Poster Session II			
	December	1	Thu	Social behavior	A13	13
6		Tue	Cognition	TBA		
8		Thu	Human behavior	A14	14	Human behavior
13		Tue	EXAM 3			