Biol 527: Animal Behavior Lecture
Class Policies and Syllabus

Instructor: Rulon W. Clark, rclark@sciences.sdsu.edu
Office hours: NLS-224, by appointment
Required text: Alcock, J. 2009. *Animal Behavior: An Evolutionary Approach*. Ninth Edition, Sinauer Associates, Inc. Additional readings assigned for specific lectures.

Blackboard: All handouts, non-textbook readings, and other course documents will be posted on the course blackboard site. Please check blackboard before each class period to make sure you have updated information. I will attempt to post a lecture outline for each lecture at least 24 hours in advance. You may find these outlines a useful way to organize note taking during lectures.

Course Objectives. This course provides an introduction to the study of animal behavior, with an emphasis on evolution and ecology. We will cover a variety of topics, including: natural selection and evolution; genes and the environment; animal learning and cognition; hormones and their role in mediating behavior; foraging behavior; predator-prey interactions; sexual selection; animal communication; courtship and mate choice; and social behavior. The lectures will focus primarily on ultimate explanations (why animals behave as they do), with some attention to proximate mechanisms (how they get the job done). Upon completing the course, students should be able to demonstrate (1) comprehension of major concepts and theories in behavioral ecology; (2) knowledge of factual generalizations about behavior; (3) familiarity with some of the scientific literature on animal behavior; and (4) an enhanced ability to critically evaluate research studies in the discipline.

Participation and Attendance. Attendance in the lecture is strongly encouraged since lecture coverage will not match the text exactly; I will use different examples from the literature and incorporate material from other sources. In addition, we will have several in-class assignments throughout the semester that you cannot make up. I expect everyone to contribute to the course by asking questions when they are confused and participating in class discussions. To facilitate learning, please be respectful of your classmates: (1) Be prepared for class and arrive on time, (2) Avoid conversations with others during class (3) Limit food and beverages to those that can be consumed quietly, (4) Turn off pagers and cell phones before class, (5) Adhere to student conduct code (http://www.sa.sdsu.edu/srr/index.html); violations of the conduct code (i.e., cheating on exams or plagiarism) will result in a failing grade for that assignment.

Exams. Exams will emphasize comprehension of concepts in behavioral ecology, as covered in lecture and assigned readings. The questions will be designed to test your ability to synthesize and apply this information to novel situations. We will have 3 midterms and 1 comprehensive final. You must bring one scantron form (#882ES) and a #2 pencil to each of the five lecture exams. Aztec and KB bookstores have these forms.
Midterm 1: Thursday, Oct 1.
Midterm 2: Thursday, Nov 5.
Midterm 3: Thursday, Dec 10.
Final: Thursday, Dec 17, 10:30 – 12:30

Writing assignments. Students will complete two related writing assignments: a literature summary and a grant proposal. These papers will focus on 3 closely related journal articles from the recent animal behavior literature. The literature summary must present a clearly organized, logically sound, and carefully written summary concerning the specific question or problem addressed by the 3 articles.

Your goal in this paper is not just to summarize the information, but to draw your own conclusions on the topic based on the data presented in the papers and your own logic and reasoning. You will take your ideas one step further for the grant proposal assignment. The grant proposal will follow the guidelines given by an actual society that funds undergraduate and graduate research: the Sigma Xi Grants-in-aid-of-Research (GIAR) competition (http://www.sigmaxi.org/programs/giar/index.shtml). More details will be provided on these assignments as their due dates approach.
Literature summary: Due Thursday, Oct 22
Grant proposal: Due Thursday, Dec 10

In-class Assignments. Over the course of the semester, we will have several unannounced in-class assignments. These will generally be short (10-15 minute) written assignments that synthesize complex topics we've covered in the preceding lectures. These assignments may also involve working cooperatively with several other students in small groups.

Grades. Your lecture grade will be based on 4 in-class exams (3 midterms and a comprehensive final), two writing assignments, and the in-class assignments given throughout the semester. Each exam will be worth 15% of your final grade, each writing assignments will be worth 15%, and all of the in-class assignments will be 10% combined.

Final grades will be assigned based on a standard plus/minus scale:

A	(93-100 %)	C+	(77-79.99 %)
A-	(90-92.99 %)	C	(73-76.99 %)
B+	(87-89.99 %)	C-	(70-72.99 %)
B	(83-86.99 %)	D	(60-69.99 %)
B-	(80-82.99 %)	F	(< 60%)

Absence policy. Please let me know as soon as possible if you will be missing lecture, and provide documentation (i.e., a doctors note). Assignments missed due to absences (including lecture exams) cannot be made up. If you can provide prior notification and a valid medical excuse for missing class, the score for the missing exam or assignment will be the average of the other lecture exams or assignments. If you are absent during an exam period with no prior notification, I reserve the right to give you no credit for the exam.

Late policy. Assignments will have 5% deducted per day of lateness.

Academic dishonesty. If you cheat on an exam or on an assignment, you will not get credit for that assignment. In addition, I will report the incident to campus judicial authorities, which could result in a failing grade for the class or expulsion from the University. Plagiarism is cheating: writing assignments must be in your own words! Information on how to avoid plagiarism is available at: http://science.widener.edu/svb/essay/plagiar.html.

Disabilities. Students who need accommodation for any disabilities should contact the Student Disability Services at 619-594-6473 (Calpulli Center, Suite 3101). After contacting the center, please set up an appointment with me to discuss specific accommodations for which you have received authorization.

Teaching philosophy. I am here to help you not only learn the material covered in class, but also develop skills that will assist you in learning throughout your academic and professional careers. To

that end, please feel free to ask questions inside or outside of class if there is something you don't understand – I want to provide a supportive community for learning.

Tentative lecture schedule. This is subject to change throughout the semester. Please refer to the course Blackboard site for updated schedules, assignments, and due dates.

Date	Topic	Readings/Assignments
Sept 1	Intro and levels of analysis	Alcock Ch 1 and 2
Sept 3	Evolution and natural selection	Alcock Ch 1 and 2
Sept 8	Genes and behavior	Alcock Ch 3, Robinson 1998
Sept 10	Neural mechanisms	Alcock Ch 4, Catania and Remple 2005
Sept 15	Navigation and migration	Alcock Ch 4, cont
Sept 17	The organization of behavior	Alcock, Ch 5
Sept 22	Hormones and behavior	Alcock Ch 5, Bass 1996
Sept 24	No class	None
Sept 29	Learning, cognition, and consciousness	Hauser 2000, Griffin 1984, Cartmill 2000
Oct 1	Exam 1	None
Oct 6	Habitat selection	Alcock Ch 8
Oct 8	Foraging behavior	Alcock Ch 7
Oct 13	Antipredator behavior	Alcock Ch 6, Couzin et al 2002
Oct 15	Predator/prey coevolution	Milius 1999, Langmore et al 2003
Oct 20	Animal communication	Alcock Ch 9
Oct 22	Signal evolution	Elias et al. 2006
Oct 27	Reproduction	Alcock Ch 10
Oct 29	Competition for mates	Alcock Ch 10 cont
Nov 3	Alternative mating strategies	Bleay et al. 2007
Nov 5	Exam 2	None
Nov 10	Mating systems	Alcock Ch 11, Emlen and Oring 1977
Nov 12	Parental care	Alcock Ch 12, Mock et al 1990
Nov 17	Social behavior	Alcock Ch 13
Nov 19	Game theory	Alcock Ch 13 cont
Nov 24	No class	None
Dec 1	Kin selection	Alcock Ch 13 cont
Dec 3	Cooperation, conflict and family dynamics	Alcock Ch 14, Packer and Pusey 1997
Dec 8	Human behavior	Nesse and Williams 1998, Ridley and Low 1993, Wright 1995
Dec 10	Exam 3	None
Dec 17	Final exam, 10:30 am – 12:30	None

Furloughs. Due to extraordinary budget cuts to the CSU, fees to students have increased 32%, many sections have been cut and faculty are required to take nine (9) unpaid furlough days each semester. These furlough days will mean that I will be unable to include all elements of this class that I believe would provide the best educational experience. Unfortunately this is the result of a dramatic cut to the CSU by the state after years of under-funding the system. The days I will be furloughed are: Aug 31, Sept 11, Sept 24, Oct 16, Oct 30, Nov 16, Nov 24, Dec 4, and Dec 11. On these days, class will not meet (as noted in the lecture schedule above), and I will not be available for office hours, phone or email consultation.