

ZOOL 3600 ANIMAL BEHAVIOR

Fall 2019

Instructor: Dr. Marina M. Gerson

Pronouns: she/her/they

Office: N-272

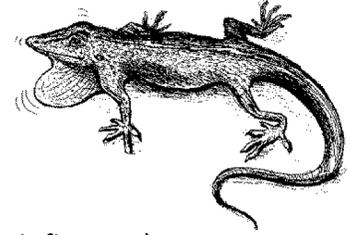
Office Hours: M/W 12-12:30, Tue/Th 9:30-10:30, and by appt.

Contact Information: mgerson@csustan.edu or (209) 664-6547

Text & Materials: Dugatkin, L.A. 2009. Principles of Animal Behavior, 3rd ed. (2nd edition is fine, too)

iClicker (Used is fine. We will do roll call registration in class. Do not pay to register.); small bound notebook

Blackboard site? Yes! Login at blackboard.csustan.edu for course documents and links to helpful resources.



COURSE DESCRIPTION AND OBJECTIVES

This course introduces the study of animal behavior from a biological perspective, providing theoretical background and key terminology to students pursuing careers in areas such as wildlife biology, conservation, zoology, and veterinary medicine. The course includes a general survey of forms of animal behavior across animal groups and in a variety of natural contexts (including social, foraging, antipredator, and habitat selection and use). Additionally, students will learn about modern methods of study and current research.

Course Pre-requisite: Passing grades in BIOL 1050 & BIOL 1150, or equivalent courses at another institution.

Learning Objectives

- Gain knowledge of the terms and major topics of study in the biological field of animal behavior.
- Gain an appreciation for the complexity of behaviors including discerning ultimate and proximal causes.
- Understand the evolutionary and ecological factors behind behavioral expression.
- Become familiar with modern methodology and current topics in the study of animal behavior.

Course Requirements

- Through course assignments and activities, apply knowledge of the complex nature of behavior and the evolutionary and practical causes of behavioral expression.
- Demonstrate understanding of modern methods and topics of biological behavioral studies through classroom participation and activities.
- Demonstrate retention and application of the theories, terms, and topics central to the study of animal behavior, covering the four Learning Objectives, on exams and assignments.

EXPECTATIONS OF STUDENTS

- **Maintain your academic integrity.** *Your integrity is your most valuable asset as a student* and in your future career as an educated person. In line with this, it is the policy of the Department of Biological Sciences that anyone caught *cheating* or *plagiarizing* will receive a grade of F for the course. I reserve the right to request any student suspected of cheating to take a second, different exam on the material. Protect yourself by making your integrity obvious.
- **Engage the course material** by arriving prepared for class, participating respectfully, reading the text, and being observant for animal behavior outside of class.

- **Be respectful of others** by **arriving on time**, **giving your attention** to whoever is presenting, listening to the ideas of your classmates, **turning off cell phones**, and generally being polite. This also means **no text-messaging** (yes, the person at the front of the room *can* tell what you are doing) and **no internet surfing** (it's distracting to those sitting around you).

- Students are expected to **take exams** on days and times scheduled. If you have a legitimate excuse to miss, I need to know the reason, in writing, before the exam date. If you have an emergency, you must let me know of the emergency as soon as you can. I will determine the appropriateness of taking the missed exam.

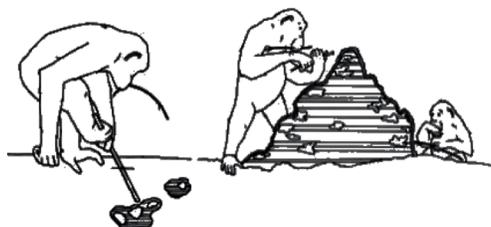
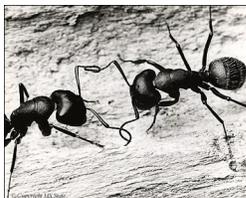
EXPECTATIONS OF THE INSTRUCTOR

- Same as those for students, in terms of **engagement** in the course, and **respect** for participants. I will do my best to **protect your privacy** and **maintain an environment** in which you can learn.
- Be **open to feedback** on the course and be flexible in order to make appropriate changes to meet student needs.
- Be **fair and consistent in assessment** of student learning.
- Be **available to students** outside of class time to answer questions and discuss class material.



Week	Lecture Topic(s)	Ch.	Reading Quiz
Aug 22	Syllabus, Course Introduction	-	--
Aug 27* Aug 29**	Introduction to the field of Animal Behavior Behavioral Ecology: the Evolution of Behavior Who? What? Where? When? How? vs. Why? in behavior	1 2	*Read <i>Interview with E.O. Wilson</i> **Read <i>Interview with Alan Grafen</i>
Sep 3, Sep 5*	Who? What? Where? When? How? vs. Why? in behavior	2	*Read <i>Interview with Geoffrey Hill</i>
Sep 10 OJ Sep 12*	Molecular Genetics & Development	3 4	*Read <i>Interview with Gene Robinson</i>
Sep 17 Sep 19	Learning	5	*Read <i>Interview with Sara Shettleworth</i>
Sep 24, Sep 26*	Midterm 1 Change faster than evolution: cultural transmission of behavior	1-5 6	*Read <i>Interview with Cecilia Heyes</i>
Oct 1* OJ, Oct 3**	Sexual Selection Mating Systems	7 8	*Read <i>Interview with Anne Houde</i> **Read <i>Interview with Nick Davies</i>
Oct 8 Oct 10*	NO CLASSES ALL DAY Family matters – Kinship Theory	9	*Read <i>Interview with Francis Ratnieks</i>
Oct 15* Oct 17**	Cooperation Finding food	10 11	*Read <i>Interview with Hudson Kern Reeve</i> **Read <i>Interview with John Krebs</i>
Oct 22* OJ Oct 24 ABP	Avoiding <i>becoming</i> food: Antipredator behavior Antipredator behavior cont.; ABP Group Formation	12	*Read <i>Interview with Anne Magurran</i>
Oct 29 Oct 31	Catch-up Midterm 2	6-12	--
Nov 5* Nov 7**ABP	Communication Choosing where to live and when (Project Commitment due online)	13 14	*Read <i>Interview with Rufus Johnstone</i> **Read <i>Interview with Judy Stamps</i>
Nov 12 OJ Nov 14*	Choosing where to live and when <i>cont.</i> (Final OJ submission) Agonistic encounters: aggression	15	*Read <i>Interview with Karen Hollis</i>
Nov 19 Nov 21* ABP	Agonistic encounters <i>cont.</i> Just for fun? Play! (ABP Progress Check-in due online)	16	*Read <i>Interview with Marc Bekoff</i>
Nov 26* Nov 28	Animal personalities: beyond anecdote THANKSGIVING HOLIDAY	17 --	*Read <i>Interview with Sam Gosling</i>
Dec 3 Dec 5	Presentations Presentations	--	--
Dec 10	Catch up & Review	1-17	--
Thurs., Dec. 12	Final Exam 8:30-10:30 am (bring a quiet snack, if you need one)	1-17	--

OJ Observation Journal Due. ABP Animal Behavior Project Component is due.



ASSESSMENT METHODS, GRADES, GRADING, AND POLICIES

In an upper division course for the Biology major, it is important for students to demonstrate both mastery of factual content and the ability to synthesize ideas based on the theories discussed in the class. Your grade will be based on class attendance (clicker points), completion of quizzes, exams, and a animal behavior research project.

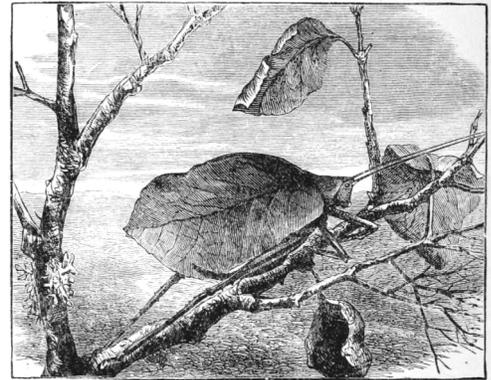
Any assignment of any kind should be turned in on the day and time it is due. However, you may turn in one late assignment in the very next class period over the course of the semester. Any other late work will be penalized by 10% per 24-hour period.

We have limited time available for Project Presentations; thus, your Project Presentation should be given on the scheduled date unless you have made an arrangement with me in advance. Following the return of any graded assignment or exam, you have *7 days in which to dispute any grade discrepancies*; please check your score against the BlackBoard record right away. To dispute the scoring of an assignment, please bring the assignment and supporting information showing why you deserved a different grade to my office, where we can discuss the issue privately.

Special circumstances: I understand that unusual circumstances can temporarily alter your availability for our class. If you know ahead of time that you will have a conflict on an important day, please get in touch with me as soon as possible. If an unforeseen incident causes you to miss an exam or presentation, get in touch with me *as soon as your circumstances allow*.

I am committed to supporting students with different learning styles and needs. If there is something in particular that I can do support your learning needs, please meet with me as soon as possible so we can arrange the accommodations that will foster your success in this course.

Lecture Recording Policy: Audio or video recording (or any other form of recording) of classes at Stanislaus State University is **not permitted** unless expressly allowed by the faculty member as indicated in the course syllabus or as a special accomodation (8/AS/10/FAC--Faculty Policy on Student Recording of Classes). Recordings are taken out of context of the classroom setting, and while they may document the exact words spoken, they do not fully document the exchange of information and understanding that occurred during the class session. If you have a particular reason why you would like to make an audio recording of lectures, please discuss this with me in my office.



ASSIGNMENT	POINTS
Syllabus exercise	10
Midterm 1	200
Midterm 2	200
Project: Observation journal	100
Project: Progress check in	10
Project: Three exam questions	10
Project: Class presentation/project	200
Participation & Quizzes (clicker points)	70
Comprehensive Final Exam	200
TOTAL POSSIBLE POINTS	1,000

Point Range	Grade Earned
926-1000	A
900-925	A-
875-899	B+
826-874	B
800-825	B-
775-799	C+
726-774	C
700-725	C-
675-699	D+
626-674	D
600-625	D-
<600	F

TUTORING ON CAMPUS – Free tutoring and writing help services are available to assist you in most disciplines, including in biology! Library Annex LX14; Phone (209) 667-3642; Web <http://www.csustan.edu/Tutoring>

CAMPUS COUNSELING SERVICES – Overwhelmed by the stress of juggling classes and your home life? Our campus offers **excellent** counseling services to help support you! New location near Student Services SSX 1.1; Phone (209) 667-3381; Web <http://www.csustan.edu/Counseling/>

STUDENT HEALTH CENTER – You have already paid for access to health care on campus. Services include: birth control, flu shots, immunizations, pharmacy, check-ups, HIV testing, TB tests, and *doctor's notes for when you are sick!* Phone (209) 667-3396; Web <http://healthcenter.csustan.edu>

LIBRARY – Even in the temporary buildings, reference librarians enjoy helping you to find out all kinds of things! You can get help in person at the Reference Desk in LX25, or by phone or chat (scan left side of library main webpage). Phone (209) 667-3233; Web <http://library.csustan.edu>

ASSIGNMENT INFORMATION

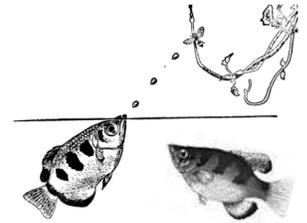
Clicker Points – Your participation with your clicker will help me to gauge the level at which I need to cover each topic and helps to keep you awake and engaged, too! It also helps to keep you accountable for being prepared for class. I know that sometimes things come up. Don't worry: you can miss three "regular" days without penalty. *Clicker days begin on August 29. On Clicker Quiz Days, ½ of your clicker points come from answering correctly on the quiz.*

Exams – In the sciences, objective exams are one of the most practical tools for assessment of individual student learning. A well-trained scientist is more than a memory-bank of facts, but can also apply her/his knowledge to solve new problems.

Question types include: very short answer, fill in the blank, draw a diagram or graph, complete a table, give an example, T/F (if F, why?), mini-essay.

Comprehensive Final Exam (value 200 pts.)

- Format will be similar to that seen on the midterms, but will also include questions from student presentations.
- 125-150 points will come from the new material.
- 50-75 points will be comprehensive, drawing on information learned over the course of the entire semester.



Observation Notebook (DUE: every third week, value 100 pts.): The Observation Notebook is an Individual Project.

Being a good scientist requires being a good observer. You will keep a journal of animal behavior that you observe out and about during your day-to-day routine. You will start your entries right away, and you will turn in your notebook every other week. Your observations will likely lead you to your Animal Behavior Project idea.

- Four entries per week = twelve entries per three-week period.
- Turn in at the beginning of class on the due dates; receive back at the beginning of class the next class period.
- Graded on a scale of 0-3 (0=didn't turn in, 1=turned in partially complete, 2=complete, 3=*insightful, meaningful & complete* entries).
- *Extra credit will be available through special Observation Challenges through the semester!*

Animal Behavior Project – How can a scientist really know about animal behavior without performing any research? Over the course of the semester you will complete a short scientific observational study of a focal species. You will work in groups of 4 students to come up with a plan, execute your study, and report your results in the format of an scientific oral presentation during the last four weeks of the semester. **Note: the majority of vertebrate animals are protected by law in California. Do not plan to handle or disrupt vertebrate animals unless you happen to have the appropriate legal permit.**

Project Commitment (DUE ONLINE: Nov. 7; no points)

- 1-5 typed paragraphs roughly outlining what you plan to study.
- Completed table of group members, contact information, and roles of each member.
- List at least one primary literature article that reports on a study similar to the one your group proposes.

Progress Check (DUE Nov 21 ONLINE: value 10 pts.)

- 1-2 paragraphs outlining your research goal(s).
- Timeline showing plan of **what** will happen **when** and **who** will do it, in order for your project to be completed.
- Updated table of group members, contact information, and current roles of each member.
- Minimum list of three primary literature articles that report on a study similar to the one your group is working on.

Three written questions & complete answers (DUE ONLINE: 24 hours before your presentation; value 10 pts.)

- Submit by e-mail to me **by noon on the day prior** to your presentation.
- Each question should be similar in format to those seen on the first two exams.
- You should include at least one example of a complete answer for *each question*.
- Questions will be posted on BlackBoard by the end of the day.

Oral Presentation (DUE: varies by group; value 200 pts.)

- This will be a scientific style report of the results of your study and how your work fits into a broader scientific context.
- Presentations should be concise, but should include: Introduction (background information and purpose of study), Methods, Results, and Discussion (including how your conclusions fit in with other studies).
- Presentations will be **no more than fifteen minutes** long. Please expect an update on time limits.
- You will need to include at least two primary literature articles, as background information or to place your study in a wider context in the conclusions.
- Your last slide **must** include your final list of group members and the roles each fulfilled to complete the ABP.
- I will need a hard copy print-out **or** a PPTX version of your presentation submitted to me.