

Animal Behavior: BIOL 4410

Fall, 2005 Semester
Tues. & Thurs., 1:00 – 2:30, SC 122

Dr. Helen Boswell

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Fall office hours: M, W, F: 9:00 – 10:00; Tues: 2:30 – 4:30; plus open door/appointment policy

Course Objectives:

This course will provide you with an understanding of the study of animal behavior; i.e., how and why animals behave as they do. In addition to identifying major behavioral patterns and processes, you will be given experience in observational and experimental techniques used to study behavior. We will also be exploring the scientific literature of this field.

- Upon successful completion of this course, you will be expected to be able to:
 1. Understand both evolutionary and physiological/developmental forces in influencing behavioral patterns;
 2. Apply scientific methods to experimental and observational study of behavior;
 3. Use scientific literature to formulate questions and hypotheses;
 4. Effectively communicate (oral & written) to discuss scientific findings, concepts, and advanced topics related to behavior.

Required Texts:

Alcock, J. 2005. Animal Behavior, 8th ed.
Pechenik. 2004. A Short Guide to Writing About Biology, 5th ed.

Policy on Missed or Late Work:

An exam may be taken late and/or an assignment turned in late if you experience a serious injury/illness or death in the family. You must notify me immediately and take the exam or turn in your late assignment within a day of your return back to school. Other excuses must be discussed with me and evaluated on an individual basis. Other assignments are due during the class period indicated. A full letter grade will be deducted for each day that an assignment is turned in late with exceptions noted above. Please note that there are no make-ups for missed field investigations (see next page).

Your Responsibilities as a Student:

- Show up to class on time!
- Turn off cell phones during class!
- Course requirements must be completed independently. Plagiarism of any of the course requirements will not be tolerated. If you have been determined to be dishonest in completion of any course requirement, you will receive a zero for that work and depending on the extent of the dishonesty, may fail the course and may receive further action from the university.

Course Requirements:

One mid-term exam, one final exam.
Discussion outlines and quizzes.
Field notes and investigations.
Research project.

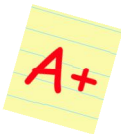
Grades:

A: ≥ 92 ; A-: 90-91; B+: 88-89; B: 82-87;
B-: 80-81; C+: 78-79; C: 72-77; C-: 70-71;
D: 65-69; F: < 65

Midterm exam:	150 pts.
Final exam:	150 pts.
Discussion outlines:	100 pts.
Quizzes:	180 pts.
Field notes:	95 pts.
Field assignments:	125 pts.
Research project	
Proposal:	50 pts.
Presentation:	50 pts.
Final paper:	100 pts.
Total: 1000 pts.	

American Disabilities Act Statement:

Students with medical, psychological, learning, or other disabilities desiring academic adjustments, accommodations, or auxiliary aids need to contact the Southern Utah University Coordinator of Services for Students with Disabilities (SSD) in Room 206F of the Sharwan Smith Center, phone (435) 865-8022. SSD determines eligibility for and authorizes the provision of services.



Course Requirements and Grading

Discussion Outlines & Quizzes: 280 pts.

On Tuesdays, we will be having lectures/discussions. To be prepared on these days, you must complete an assigned reading before coming to class. You will be taking turns within a group of three to outline the readings. In class, you will use these outlines and discuss certain topics within your group. At the end of these class periods, you will be given a quiz to be completed individually. There are no make-ups for quizzes, as they are a result of your participation in discussions.

Outlines: 100 pts. (4 @ 25 pts.)

Quizzes: 180 pts. (12 @ 15 pts.)

Field notes & investigations: 220 pts.

Although there is no formal lab section for this class, we will be conducting scientific investigations on most Thursdays. Assignments based upon these investigations will allow you to hone your application and presentation of scientific techniques. You must keep a separate field notebook to document all of your notes & observations made during these investigations. Field notes must also include all notes & observations from your research project (see right). There are no make-ups for investigations.

Field notes: 95 pts.

5 investigations @ 10 pts. ea

Project notes: 45 pts.

Assignments: 125 pts. (5 @ 25 pts.)

Research Project: 200 pts.

You and a group of two other students will propose, carry out, write, and present a research project based on an animal behavior topic of your choice. An optional research trip to San Diego is planned, or you may work on your project locally. Preliminary group proposals (introduction, outline of methods, & two annotated citations) are due on Sept. 22, at which time you will discuss your ideas with the rest of the class. Your group will then have two weeks to develop your final proposal. At the end of the semester, your group's final products for the project will consist of an oral presentation at the Biology Department Symposium and a written paper.

Proposal w/annotated bibliog.: 50 pts.

Presentation: 50 pts.

Final paper: 100 pts.

Exams: 300 points

Exams will consist of short essays where you will be required to synthesize and apply the material you've learned up to that exam. The week before the exam, you will be given a review sheet with possible topics & questions. Materials from readings, lecture/discussion, and lab activities will be included.

Midterm: 150 pts., Final exam: 150 pts.

All course fees (\$35) are allocated towards lab supplies that you will use for class investigations and towards field trip expenses.

Information contained in this syllabus, other than grading, late assignments, makeup work, and attendance policies, may be subject to change with advance notice, as deemed appropriate by the instructor.

Date		Topic	Readings and Assignments due
Aug 30	T	Evolution & Animal Behavior	(Pechenik Ch. 2)
Sept 1	R	<i>Investigate: Projects & Field Notes</i>	Alcock Ch. 1; Pechenik Ch. 9
Sept 6	T	Proximate & Ultimate Questions	Alcock Ch. 2; Weekend field notes (<i>investigation</i>) due
Sept 8	R	<i>Investigate: Hypothesis Testing</i>	Pechenik Ch. 4 & pp. 199-209.
Sept 13	T	Ultimate: Survival Adaptations	Alcock Ch. 6
Sept 15	R	<i>Investigate: Field Observations</i>	Article summary (lab) due; Pechenik pp. 143-149.
Sept 20	T	Prox.: Behavioral Development	Alcock Ch. 3; Field data & field notes (<i>investigation</i>) due
Sept 22	R	<i>Discussion: Research Plans</i>	Prelim. Research Proposal w/ 2 Annot. Citations due
Sept 27	T	Ultimate: Feeding Behavior	Alcock Ch. 7
Sept 29	R	<i>Investigate: Feeder competition</i>	Pechenik pp. 151-157.
Oct 4	T	Proximate: Neural Mechanisms	Alcock Ch. 4; Methods & field notes (<i>investigation</i>) due
Oct 6	R	<i>Investigate: Spatial learning</i>	Final Proposal and Annotated Bibliography due
Oct 11	T	Ultimate: Habitat Choice	Alcock Ch. 8
Oct 13	R	Mid-term Exam	Review all material
Oct 18	T	Proximate: Neurons and Hormones	Alcock Ch. 5
Oct 20	R	Project Work	
Oct 22-24		California Tidepools	Research!
Oct 25	T	Ultimate: Communication	Alcock Ch. 9
Oct 27	R	<i>Investigate: Signalling</i>	Pechenik, pp. 157-185.
Nov 1	T	Ultimate: Reproductive Behavior	Alcock Ch. 10
Nov 3	R	<i>Invest.:</i> Effective Data Presentation	Results & field notes (<i>investigation</i>) due
Nov 8	T	Ultimate: Mating Systems	Alcock Ch. 11
Nov 10	R	<i>Investigate: Mate choice</i>	Pechenik, pp. 191-199.
Nov 15	T	Ultimate: Parental Care	Alcock Ch. 12
Nov 17	R	<i>Investigate: Data Analysis</i>	Mate choice & field notes (<i>invest.</i>) due
Nov 22	T	Ultimate: Social Behavior	Alcock Ch. 13;
Nov 29	T	Ultimate: Human Behavior	Alcock Ch. 14
Dec 1	R	<i>Discussion: Making Connections</i>	Pechenik Ch. 13
Dec 6	T	Presentations of final projects	Practice presentations
Dec 8	R	Presentations of final projects	Practice presentations; Final paper and field notes due
TBA		Biology Research Symposium	Final Presentations
Dec 15	R	Final Exam, 3:00 – 4:50	Final Exam