

Biology 132: Introduction to Animal Behavior/ Spring 2012

Instructor: Dr. Debbie Schlenoff

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Office hours: Thursdays 2:30-3:30 and by appointment

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Course Goals

We will explore behaviors found in a variety of animals and try to understand some of the mechanisms behind them, how they develop, their evolutionary history, and what functions they might serve. Many examples will be used to illustrate concepts in animal behavior and to develop an appreciation for the many interesting things that animals do to survive and reproduce. We will also examine the methods with which scientists study these behaviors. By doing this, you will better understand how science works and become comfortable evaluating scientific information; a skill required by all people whether or not they pursue a career in the sciences.

Recommended Text: Goodenough, J.; McGuire, B. and Wallace, R.; **Perspectives on Animal Behavior** There are copies on 2-hour reserve in the Science library located in Onyx Bridge.

It would be helpful to read (or at least skim) the assigned chapters before coming to class and to then read more carefully those parts relevant to lecture, assignments, and discussion.

Course Format

Lectures (Tuesdays/Thursdays 4:00-5:20 pm, 282 Lillis)

You will be responsible for all material presented in lecture.

The course schedule is tentative and subject to change; adjustments will be announced in class.

Lecture outlines containing the text of the PowerPoint slides are available on Blackboard. Most students have found it useful to print out the outlines before class to take notes on without having to try and write down everything on the slide. Please keep in mind that these are merely outlines for your convenience in taking and organizing notes. They are not meant to serve as a complete set of lecture notes for studying for the exams. *There is a strong positive correlation between attendance in lecture and class grades.*

Occasionally, there are group and writing activities that occur during lecture. It is our expectation that you participate in these activities. Your active involvement promotes understanding of the material and preparation for exam questions.

I appreciate feedback on the lectures. Questions are welcome and encouraged during and after lecture, during office hours, and via e-mail.

Discussion Sections (Thursdays, 111 Huestis)

Participation in discussion sections is a required part of this class and will count toward your final grade. Much of discussion will be devoted to developing and preparing to research and write a project paper. In addition, hands-on activities will allow us to ask questions about animal behavior and design experiments to search for answers. All assignments associated with the project are due in discussion section on the date noted in the syllabus. Students are expected to attend the section in which they are registered.

Evaluation

Midterm Exam 1	20 %
Midterm Exam 2	20%
Final Exam	22%
Project	20%
Question Sets	9% (3 HW sets at 3% each; submit through Blackboard)
Lecture Questions	6% (6 out of 8 lecture participation questions, 1% each)
Discussion section	3 % (Hand-outs, attendance, participation)

Exams will include material from the lectures, discussion and the video clips shown in class. The structure of the **Midterm Exams** will be mixed format (short answer, multiple choice, short essay). Details will be announced in class. The **Final Exam** will be all multiple choice and cumulative. Scantrons will be handed out in class; please bring a #2 pencil to all exams.

Make-up Exam Policy: Because this is such a large course, make-ups are **NOT** administered except in the case of a severe medical condition or other extreme documentable emergency. It is your responsibility to contact the instructor as soon as possible and to provide documentation.

Note the date and time of the final exam. There will be no early exams!

Question sets get you thinking about the material and allow you to focus and organize your studies. They serve as study guides and are good preparation for taking the exam. The answers to the Question Sets will be posted on Blackboard after the due date. We recommend you read through these in preparation for the exams.

Question sets will be posted and submitted through Blackboard by the due date noted in the syllabus. Enter your answers in the textbox that appears when you open the assignment link. You may discuss the material with others but please submit your answers in your own words. Copying and pasting from the notes is a form of plagiarism and will not do much to promote understanding or retention of the material.

Project The Project will involve forming an hypothesis and testing predictions about animals that are easily observed outside of class. Assignments pertaining to the project will be due in discussion section. These will contribute points toward your final project grade. A Project Proposal will be due in section and will give you an opportunity to discuss your ideas with your instructors. We will explore ways to find reputable scientific sources and how to write up a scientific research paper. Information about the project is posted in the Project Folder in Course Documents on Blackboard. Please read these documents carefully and ask if you have any questions.

End-of-lecture questions. Questions will be posed during eight lectures throughout the term to reinforce the material covered in lecture or to provide feedback to the instructors. Six of these will contribute points toward your final grade. Absolutely **NO** make-ups under any circumstances. You may miss two of these without penalty.

Professional Conduct:

Plagiarism will not be tolerated. You are expected to do your own work on homework assignments, projects, and exams. When writing up your homework assignments and papers, you are expected to paraphrase (use your own words). When writing up your project papers, give credit to the sources of your information.

You are encouraged to discuss ideas with each other and to study together, but don't copy someone else's work, or allow them to copy yours. Academic dishonesty is a serious offense. Please refer to the University of Oregon Student Conduct Code by which all students are expected to abide.

Classroom Etiquette:

1. Please arrive on time.
2. Please don't leave early. This is very disruptive to everyone. In turn, I will not lecture beyond 5:20. If you have an unusual circumstance and must leave early, then please sit near the exit so you can leave unobtrusively. A break from lecture to engage in small group work does not signal the end of lecture.
3. Please refrain from engaging in activities that could be distracting to your fellow students.
 - a. We ask that you not converse with your neighbors when someone else is talking (instructor or classmate) as this interferes with the ability of other students to learn.
 - b. Please turn your cell phones off during lecture.
 - c. Please use computers during lecture only to take notes.
 - d. Please do not pack up your things early as this makes it difficult for students around you to hear the end of the lecture.

If you are having a problem that interferes with your ability to do the work in this class, please tell us about it as soon as you can.

The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in barriers to your participation. You may also wish to contact Disability Services in 164 Oregon Hall at 346-1155 or disabsrv@uoregon.edu

The course schedule below is tentative and subject to change. Additional information will be provided in class or via e-mail and blackboard.

* See the Blackboard: Course Documents: Projects Folder for instructions on project assignments. Each assignment contributes points to your project grade. Submit to your GTF in discussion section.

** Question Sets posted and submitted on Blackboard: Course Document.

TENTATIVE COURSE SCHEDULE

Week 1

Lecture Topics

4/3 The Study of Animal Behavior. What kinds of questions help us understand behavior and how to we design ways to get answers?

4/5 Natural Selection and Adaptation. How do we explain the evolution of animal behavior?

Discussion Sections 4/5 Discussion sections do NOT meet.

ASSIGNMENTS: Read project information on Blackboard*

Optional textbook reading Ch1, 2, 4

Week 2

Lecture Topics

4/10 Genetic Analysis of Behavior. Are there ways to determine whether some behaviors have a genetic basis?

4/12 Types of Learning. How does learning contribute to success in animals? What is the variety of types of learning that we can examine?

Discussion Sections 4/12 Intro to Project/ Scientific method/ Asking questions and posing hypotheses

ASSIGNMENTS: Begin generating ideas for project.

Optional textbook reading Ch3, 5

Week 3

Lecture Topics

4/17 Early learning, Imprinting, and Development. How does early experience help shape an animal's behavior throughout its life?

4/19 Biological Rhythms/Migration. Do animals show patterns of behavior? Why do animals migrate? How do they find their way?

Discussion Sections 4/19 Meet for *Duck Lab* at Millrace (corner of Onyx and Franklin)

ASSIGNMENTS: Fill out initial project proposal form.

Question Set 1 Due before 11:00 pm, Thursday, 4/19**

Optional textbook reading Ch 8, 9,10

Week 4

Lecture Topics

4/24 EXAM 1

4/26 Nervous system and Behavior. How does an understanding of the nervous system help us understand animal behavior?

Discussion Sections 4/26 Discuss Project Ideas. **Bring Initial Project Proposal Form ***

ASSIGNMENTS: Work on project. Collect initial data.

Optional textbook reading Ch 6

Week 5

Lecture Topics

5/1 Foraging Strategies. What strategies do animals use to obtain food? How do they balance costs and benefits?

5/3 Anti-predator Strategies How to keep from being someone's dinner.

Discussion Sections 5/3 Dragonfly nymph predator experiment. Predator Simulation.

ASSIGNMENTS: 5/3 Finalized Project Plan with initial data due in discussion*

Optional textbook reading Ch 12, 13

Week 6

Lecture Topics

5/8 Sexual Selection. What adaptations have arisen in animals to attract a mate and compete with rivals?

5/10 Mating Systems. How do mating strategies affect reproductive success?

Discussion Sections 5/10 BEES. How to write a scientific paper. How to Find Reputable References.

ASSIGNMENTS: Read scientific paper posted on Blackboard.

Question Set 2 Due Thursday, 5/10 before 11:00 pm **

Optional textbook reading Ch 14,15

Week 7

Lecture Topics

5/15 EXAM 2

5/17 Parental Care. Who takes care of the kids?

Discussion Sections 5/17 Peer Review of Project draft

ASSIGNMENTS Term Paper Draft Due*. Bring in your Draft Paper including a Data Figure.

Optional textbook reading Ch 15

Week 8

Lecture Topics

5/22 Social Groups: What are the Benefits, Costs, and Dynamics of living in social groups?

5/24 The evolution of altruism. Under what conditions does it pay to help others?

Discussion Sections 5/29 PROJECT PRESENTATIONS in Section

ASSIGNMENTS **PROJECT PAPER DUE** in section*

Optional textbook reading pp413-415 Ch 19

Week 9

Lecture Topics

5/29 Social Groups: conflict and cooperation. Under what circumstances might individuals in a group cooperate?

5/31 Cooperation, Awareness and Social Intelligence. How aware are animals of others in their groups? How aware are they of their own mind?

Discussion Sections 5/31 TBA

ASSIGNMENTS Begin reviewing for final exam.

Optional textbook reading Pp401-402

Week 10

Lecture Topics

6/5 The Human Animal: Evolutionary psychology. How do we examine human behavior from an evolutionary perspective?

6/7 Communication. How do animals communicate? Is there evidence for honest signaling? For deceptive signaling?

Discussion Sections 6/7 Share “interesting animal facts”. Review

ASSIGNMENTS Question Set 3 Due before 11:00 pm, Thursday, 6/7**

Optional textbook reading Ch 16, pp382-387

FINAL EXAM June 14, Thursday, 13:00 (1:00pm)
