SYLLABUS Animal Behavior

Instructor: Alan Shanks (ashanks@uoregon.edu or 888-2581 ex 277)
TA: MacKenna Hainey

My office is in the Terwilliger Building and my door is always open. Mackenna has an office in Dr. Emlet lab

Class Schedule: Thursday 9:00 AM to 5 PM, Friday 2:30-3:30

Course Description

This class is a general survey of the entire field of animal behavior. We will discuss everything from how organisms sense the world, to what they do with this information and how evolution has channeled behaviors. The class meets one day a week. During each class meeting there will be a long lecture. The lab portion of the class will be almost entirely student directed projects, which will provide lots of hands on experience working with animals and a great deal of opportunity for field work. On Fridays there is a one hour discussion session in which we will discuss two books on dog behavior.

Learning Outcomes

By the end of the course, students will:

1. Have a basic understanding of animal behavior.
2. With this background of knowledge students will be able to understand how, for example, organisms sense gravity and light, how this information is processed and used, the variety of techniques animals use to navigate, how behavior is under the influence of natural selection, and how kin selection works.
3. In the laboratory section, students will develop an independent experimental project studying animal behavior, carry out the experiment, and write up the results as a scientific paper. The purpose of this lab exercise is to train students in the scientific method from the development of a question through to the completion of a study and its reporting to the scientific community.
4. Students will practice their ability to communicate scientific ideas via oral presentations (2) and writing.

Text Books

Tristram Wyatt, Animal Behaviour; a very short introduction

This is a very short text book, which is available for about $10.50 from Amazon.

Approximate Class Schedule

Week 1.

- 11 Jan. 9:00 AM: Lecture: Brief History of Animal Behavior, Review of Evolution, The Scientific Method, First concepts in Animal Behavior. Lab: The scientific method, Begin group project on designing an experiment to test an hypothesis. Readings: Chapters 1
  12 Jan. 10 AM One hour discussion. Present project design and discussion.

Week 2.

- 18 Jan 9 AM Lec. 2: Neurobiology of Behavior. Readings: Chapters 2. Lab. Work on setting up class projects

The individual research projects will be written up as a scientific manuscript and will be submitted on the afternoon of ? - we need to decide on a due date. I will describe in detail what I expect and offer suggestions on how to write a scientific paper. We also need to decide on a date for the final.

On the last day of class, 3 June, you will present the results of your research to the class in a short presentation (10 to 15 min plus questions). This talk is for fun and will not be graded. I will describe in detail how to give a good presentation.

During the class you will give two short presentation (15 min plus questions) on a topic in animal behavior of your choice. The talks will be based on one or more scientific papers that you have read. Then you will write a short essay (2 to 3 pages double spaced, 12 pt font, 1 inch margins, with a reference section) on this topic and this will be due within two weeks of your talk. Again I will describe in more detail what I expect.

For half of the term we will discuss a book on animal behavior during our Friday afternoon discussion section. I am still trying to decide what book to choose and by about week 3 I will show you what I have and we can decide.