**ZOO 4513 ANIMAL BEHAVIOR**

Spring 2005  
Lectures in 307 BIO: Tues & Thur 11:00 am - 12:15 pm

<table>
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<tr>
<th>Office</th>
<th>Phone</th>
<th>Office Hours</th>
<th>Email</th>
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<tbody>
<tr>
<td>Prof. Herrnkind</td>
<td>309 CON</td>
<td>644-9840</td>
<td>TU, TR; 2:30-4 PM</td>
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<td>TA: Bouwma</td>
<td>309 CON</td>
<td>644-9840</td>
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Course Website: [http://bio.fsu.edu/](http://bio.fsu.edu/)

**Topics, dates, and required reading:**

**Perspective: history, methods and principles**

- TR, Jan. 6  
- TU, Jan. 11  
- TR, Jan. 13

**Machinery of behavior I: sensory processes, stimuli, coordinating mechanisms**

- TU, Jan. 18  
- TR, Jan. 20  
- TU, Jan. 25  **Reading Report I due**

**Machinery of behavior II: motor programs, neural integration, neuro-hormonal feedback**

- TR, Jan. 27  
- TU, Feb. 1  
- TR, Feb. 3  
- TU, Feb. 8

**Development of behavior: genetics, learning, imprinting, ontogeny**

- TR, Feb. 10  
- TU, Feb. 15  
- TR, Feb. 17

**Temporal patterning of activity: biological clocks, long-term cycles, seasonal effects.**

- TU, Feb. 22  **Reading Report II due**  
- TR, Feb. 24

**MIDTERM EXAM – TUESDAY, MARCH 1**

**Spatial behavior: orientation, migration, navigation**

- TR, Mar. 3  

**SPRING BREAK – MARCH 7-11**

- TU, Mar. 15

**Behavioral ecology: the function and consequences of behavior**

- Ch. 14, 15, 16
TR, Mar. 17
TU, Mar. 22  Reading Report III due
TR, Mar. 24

Mating systems and sexual selection  Ch. 17, 18
   TU, Mar. 29
   TR, Mar. 31

Communication and sociality  Ch. 12
   TU, Apr. 5
   TR, Apr. 7

Social mechanisms and evolution  Ch. 19
   TU, Apr. 12
   TR, Apr. 14
   TU, Apr. 19  Reading Report IV due
   TR, Apr. 21

FINAL EXAM – THURSDAY, APR. 28, 7:30-9:30 AM, BIO 307

Grading scale:
   A  90% and above
   B  80-89%
   C  70-79%
   D  60-69
   F  60 and below

Point breakdown:
   MT Exam  30% (of total course grade)
   FIN. Exam  40%
   Reading Reports (4)  20% (5% each)
   Pop Quizzes (2)  10% (5% each)

Testing will involve objective type questions (e.g. single word answers, multiple choice, etc.), short written responses (up to one or two paragraphs) and diagram-type illustrations or graphs that you will draw or interpret. Unannounced “pop quizzes” will allow you to evaluate your progress in mastering the material prior to the MT & FIN. exams. The Final Exam will be cumulative and integrative but ~ 75% on material since the MT.

Videos: The dynamics of behavior are best witnessed as they occur, hence frequent movies & videos selected from BBC, PBS, etc. Suggestion – jot notes on interesting or crucial elements as you will be expected to know the relevant content of the presentations and be able to integrate them into text, lecture and outside reading material.

Readings: You will be assigned four reading assignments from the animal behavior research literature, including a written report and critique on each. These provide you an understanding of how the scientific process illuminates and alters general theory and textbook concepts. Details of the assignments are given separately.
**General Course Objectives:** This class is meant to introduce both the informational/conceptual content of the discipline and the nature of scientific inquiry that reveals that material. That is;

1. To understand the historical development, scope, status and role of the discipline in respect to biology generally, with special reference to evolution, ecology and physiology.

2. To understand how scientific inquiry and research methods/techniques are applied to the study of animal behavior.

3. To provide up-to-date, in-depth explanations of significant basic concepts and inquiries; special emphasis on mechanisms underlying or regulating behavior and the function and evolutionary consequences of behavior.

4. To appreciate how classic and contemporary researchers contributed to the status of present knowledge.

5. To recognize the nature of insufficiencies of present knowledge or methods; i.e. identifying major questions and obstacles to understanding.

This document and all others produced for this course are available upon request in alternate formats for individuals with print-related disabilities. Contact Dr. Herrnkind at 644-9840 or herrnkind@bio.fsu.edu for more information.