

ZOO 4513 ANIMAL BEHAVIOR

Spring 2005

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

	<u>Office</u>	<u>Phone</u>	<u>Office Hours</u>	<u>Email</u>
Prof. Herrnkind	309 CON	644-9840	TU, TR; 2:30-4 PM	herrnkind@bio.fsu.edu
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Text: Animal Behavior – Mechanisms, Ecology, Evolution. Drickamer *et al.* McGraw Hill.

Course Website: <http://bio.fsu.edu/>

Topics, dates, and required reading:

Perspective: history, methods and principles

Ch. 1, 2, 3

TR, Jan. 6

TU, Jan. 11

TR, Jan. 13

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

Ch. 7

TU, Jan. 18

TR, Jan. 20

TU, Jan. 25

Reading Report I due

Machinery of behavior II: motor programs, neural integration, neuro-hormonal feedback *Ch. 8*

TR, Jan. 27

TU, Feb 1

TR, Feb. 3

TU, Feb. 8

Development of behavior: genetics, learning, imprinting, ontogeny

Ch. 4,

10, 11

TR, Feb. 10

TU, Feb. 15

TR, Feb. 17

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

Ch. 9

TU, Feb. 22

Reading Report II due

TR, Feb. 24

MIDTERM EXAM – TUESDAY, MARCH 1

Spatial behavior: orientation, migration, navigation

Ch. 13

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.