W2420 Animal Behavior Spring 2009

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Textbook
Sinauer Associates Inc. Sunderland, MA.

Schedule

Wed Jan 21 Course introduction

Mon Jan 26 Principles of Ethology
Reading: Snowden, CT (2004) Significance of Animal Behavior Research
The Nobel Prize in Physiology or Medicine 1973 (translation from Swedish text)
Analogy as a Source of Knowledge (1973) Konrad Lorenz
Decoding the Language of Bees (1973) Karl Von Frisch

Wed Jan 28 Scientific Methods in the Analysis of Behavior
Reading: Michael, RS (2002) Inquiry & Scientific Method

**Mon Feb 2** Evolution – *principles of natural selection*
**Reading:** Alcock, Chapter 1

**Wed Feb 4** Evolution – *adaptation, genetic traits, convergence and divergence*
**Film:** Great Transformations (55 min.)

**Mon Feb 9** Instinct and Learning
**Reading:** Alcock, Chapter 2

**Wed Feb 11** Development of Behavior
**Reading:** Alcock, Chapter 3

**Mon Feb 16** Review for Exam 1

**Wed Feb 18** Exam 1

**Mon Feb 23** Neural Control of Behavior - *sensory structures, the brain, muscles, motor behavior*
**Reading:** Alcock Chapter 4

**Wed Feb 25** Neural Organization of Behavior
**Reading:** Alcock Chapter 5


**Mon Mar 2** Specialized Traits for Survival – *anti-predator behavior*
**Reading:** Alcock, Chapter 6  
**Film:** The Evolutionary Arms Race (55 min.)

**Wed Mar 4** Specialized Traits for Survival – *arms races, parasitism*
**Reading:** Alcock, revisit Chapter 4 section on bats and moths  

**Mon Mar 9** Specialized Traits for Survival - *acquiring resources*
**Reading:** Alcock, Chapter 7  

**Wed Mar 11** Economics of Behavior

**Mon Mar 16** Spring Break

**Wed Mar 18** Spring Break

**Mon Mar 23** Ecology of Behavior
**Reading:** Alcock, Chapter 8

**Wed Mar 25** Animal Communication - *signal, sender and receiver*
**Reading:** Alcock, Chapter 9

**Mon Mar 30** Evolution of Communication  

**Wed Apr 1** Review for Exam 2

**Mon Apr 6** Exam 2

**Wed Apr 8** Reproductive Behavior 1  
**Reading:** Alcock, Chapters 10 & 11

**Mon Apr 13** Reproductive Behavior 2  
**Film:** Why Sex?  

**Wed Apr 15** Parental Behavior  
**Reading:** Alcock, Chapter 12  

**Mon Apr 20** Social Behavior 1  
**Reading:** Alcock, Chapter 13

**Wed Apr 22** Social Behavior 2  

**Mon Apr 27** Social Behavior 3  
**Film:** Winning Teams (60 min.)  
Wed Apr 29  Human Behavior
Reading: Alcock, Chapter 14

Mon May 4  Last day of classes - Review for Final Exam

Mon May 11, 1:10 to 4PM  Final Exam (614 Schermerhorn)