### LECTURE GOALS:

- □ Make explicit the implicit regarding course organization and expectations.
- □ Convey the importance of an "integrative approach" to animal behavior.
- □ Review just a few basics from Intro Bio section on Animal Behavior.

### ASSIGNMENTS AND IMPENDING DUE DATES:

Read Darwin's "Origin of Species" chapter on Instinct (available on the Courses Website) and be prepared for discussion questions (available on Courses Website) for Thursday 20170831.

### LECTURE OUTLINE:

- 1. Welcome to Bio342.
- 2. There are multiple text books available for this course.
  - a. Ryan & Wilczynski "An Introduction to Animal Behavior"
    - b. Byers "Beginner's Guide to animal Behavior"
    - c. Martin & Bateson "Measuring Behavior"
    - d. Encyclopedia of Animal Behavior (linked from Syllabus website)
  - e. Optional Alcock Edition 10 (available in library)
- 3. Readings will be posted and updated on the Website.
- 4. Read the indicated texts and readings BEFORE lecture.
- 5. Additional readings used for lecture will be available but will be more than you can read.
- 6. See the course website for additional details regarding course policies.
- 7. Lab will be highly collaborative.
- 8. Lab notebooks are required.
- 9. One definition of Animal Behavior is "Behaviour is the internally coordinated responses (actions or inactions) of whole living organisms (individuals or groups) to internal and/or external stimuli, excluding responses more easily understood as developmental changes."
- 10. Another definition of the field of Animal Behavior is "How or Why an organism gathers, responds to, or transmits information about its internal or external environment."
- 11. We will take and integrative approach to Animal Behavior combining
  - a. Ethology
    - i. each species has a unique set of behavioral solutions based upon the evolutionary challenges faced by its ancestors. (i.e. behaviors evolve)
    - ii. in order to fully understand behavior it is necessary to study it in nature.
  - b. Neuroscience
  - c. Behavioral Ecology
- 12. It is time to move beyond the "Phenotypic Gambit".
- 13. This class requires participation.
- 14. This class requires conference style comfort with each other.

### HELPFUL FIGURES & NOTES:

(All PowerPoint files will be available on the courses server after lecture. The subset of figures and notes here are meant to assist your note taking or studying.)

none today



# VOCABULARY:

(Practice writing interesting, informative sentences that include, and capture the meaning of, 4-5 words from this list. To simply memorize a definition, is not sufficient.)

Animal Behavior Integrative Animal Behavior Phenotypic Gambit Ethology

## PRACTICE EXAM QUESTIONS:

- 1. Describe different ways one can be "integrative" in Animal Behavior.
- 2. What is lost when a researcher adopts the "phenotypic gambit"?
- 3. What are Suzy's office hours and how do you get help in this class if you cannot attend posted office hours?
- 4. Write your own definition of animal behavior. Give two examples to help explain your definition, one that is a behavior and one that is not.

## READING FOR TODAY:

Readings will include information that goes beyond, but supports, the lecture material. (Additional suggestions (gray) are provided for students wishing to pursue the topic farther.)

For fun: Look up some of the historic figures from Animal Behavior.

## READING FOR NEXT LECTURE:

Read Darwin's "**Origin of Species**" chapter on Instinct (available on website) and be prepared for discussion questions (available on website) for Thursday.