

*The study of behavior encompasses all the movements and sensations by which animals mediate their relationship with their external environment -- physical, biotic, and social. No scientific field is more complex, and none is more central to human problems and aspirations.*

W.D. ALEXANDER 1975

### **Course Objectives**

As Niko Tinbergen, one of the founders of modern Ethology and Nobel Laureate, pointed out: If you ask why an animal behaves in a particular way, you could be seeking one of four different kinds of answer. You could be asking about the evolutionary history of the behavior: Why did it evolve the way it did? You could be asking about its current function: Through which of its consequences does natural selection act to keep it as it is? Thirdly, you might be interested in the stimuli and psycho-physiological mechanisms that lead to the behavior being performed: What causes it? Finally, you might ask about the behavior's development: How does the behavior come to be expressed as it does during the life of the individual animal? A complete understanding of behavior involves investigation of all four questions. This course focuses on the two ("why") questions, whereas Animal Behavior [B.C. 455] stresses the two ("how") questions.

### **Instructor**

Frank R. Moore  
Professor, Biological Sciences Office  
720 or 810 JST  
hrs: Appointment [266-4748]  
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### **Textbook**

Alcock, J. Animal Behavior. Sinauer Associates. Most recent edition

### **Attendance**

Whereas I would argue that it is in your best interest to attend lecture, that is your decision. When you do attend lecture, please be prompt. It is disruptive, not to mention ill-mannered, to interrupt lecture.

### **Students with Disabilities**

If a student has a disability that qualifies under the American with Disabilities Act and requests accommodations, he/she should contact the office of Support Services for information on the appropriate policies and procedures. USM Box 8586, 266-5024.

### **Drop Policy**

The last day to drop this course without academic penalty is February 19th. Please be advised that I will not approve permission to drop this course after the designated last day to drop unless extenuating circumstances justify my doing so. A failing grade or a decision that the course is too difficult do not represent extenuating circumstances.

### **Evaluation**

Students will be assigned final letter grades based on the number of points gained relative to others enrolled in the course. Students must be concurrently enrolled in lecture [B.C. 442] and lab

[B.C. 442L] and earn a single grade for both lecture and laboratory credit. Three lecture examinations account for 60% of your grade. Exams are largely discussion-oriented, each covers approximately one-third of the lecture material, and the last is scheduled during exam week. Makeup exams, which will be given during Final Exam period, are contingent on a disabling condition or situation [independent, written corroboration necessary]. Laboratory performance accounts for the remaining 40% (see Laboratory Syllabus).

<b>100 - 90</b>	<b>= A</b>
<b>89 - 80</b>	<b>= B</b>
<b>79 - 65</b>	<b>= C</b>
<b>64 - 50</b>	<b>= D</b>
<b>49 below</b>	<b>= F</b>

### **Lecture Time and Location**

**Lecture Topics** Lecture focuses on a series of topics (see Alcock Chapters 7 - 14), including:

- < Use of Habitat
- < Foraging Behavior
- < Anti-predator Behavior
- < Ecology of Sexual Reproduction & Male/Female Reproductive Tactics
- < Sociality

In addition, a set of lectures on Functional Ecology (see Alcock Chapters 1 - 3) will provide background and introductory material for the above topics.

You will receive a handout covering the lecture material, reading assignments, and suggested literature for each topic. In addition, articles from the primary literature will accompany lectures devoted to the different topics.