Biology 409: Animal Behavior Fall 2005

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Office: 164E Pryor-England Science Center
Required Text: *Animal Behavior*. 8 ed. John Alcock. 2005.

1. We will cover most of Alcock's book. Lectures will be a general overview of the theories and concepts in each chapter and additional experiments addressing the theories. I will present the first six chapters and each class member and I will team-teach one of the last eight chapters.

   I anticipate covering one chapter per week. Your are expected to have read each chapter prior to Monday's class meeting. That week's chapter will be discussed in class on Monday and Wednesday. Each Friday we will do some type of supplementary work; discuss a journal article, field work, project work, guest lecturer, etc. When discussing journal articles I will designate a *Friend* and *Foe* for the paper. They will be responsible for carrying the discussion and ensuring that the pertinent points are emphasized and examined. Friend and Foe participation will be graded on a scale of 1-10.

   When we discuss journal articles each student will be required to write a 2 paragraph summary of the paper just prior to our discussion.

2. We will design and execute a class project in accordance with scientific methodology. A goal will be to complete analysis of our data in time to present the research at the Arkansas Academy of Science meeting to be held in April 2006 at Lyon College in Batesville. Each student is expected to have substantial input into the project. Final form of the project will be a written report in scientific format or a poster presentation in scientific format.

3. We will have three lecture exams during the semester, each worth 75 pts. Format for the exams will primarily be short answer and essay, although all formats are fair game.
   Exam dates:
   Friday, September 23, Friday, October 28, Monday, December 12 (Final Exam period)

4. Each student will design a research project that addresses a topic appropriate for publication in the journal *Animal Behaviour*. It should include field work and lab work to experimentally test a well formulated hypothesis generated from a literature review. Your work will be presented in the form of a research proposal formatted for submission to an extramural funding source, such as NSF or Arkansas Game and Fish. While this assignment is to prepare the proposal only, it is my hope that one or more of you may want to carry-out such a project in a future semester. Therefore, your project should be designed to be carried out with the facilities and equipment available at Harding University. Your proposal should include, *but is not limited to*, the following:
   -a question with an Animal Behavior emphasis
   -details of a scientifically valid experimental design
   -an introduction and discussion that leads to a clear and testable hypothesis
   -a brief and appropriate literature review referencing how your work will "fit" in the literature
   -a budget

5. How your grade will be determined.

Lecture exams:	3X75 pts.
Teaching effort:	50pts
Article summary:	10pts each
Friend/Foe analysis:	25 pts max/ participation
Class participation:	25 pts max
Project Participation :	75 pts max
Research Proposal:	75 pts

6. This is a senior level class. You are expected to attend every class meeting. Since this course is theoretically based, missing even one discussion can leave one lost in future discussions of the next level of theory. It is important in learning this type of material that you and your peers express novel ideas and approaches to questions, challenges to proposed theories, etc. Therefore, you are expected to participate verbally in class room lectures and Friday discussions.

7. **Students with Disabilities:** It is the policy for Harding University to accommodate students with disabilities, pursuant to federal and state law. Therefore, any student with a *documented disability* condition (e.g. physical, learning, psychological, vision, hearing, etc.) who needs to arrange reasonable accommodations, must contact the instructor and TRIO Student Support Services at the *beginning* of each semester. (If the diagnosis of the disability occurs during the academic year, the student must self-identify with the Disabilities Director *as soon as possible* in order to get academic accommodations in place for the remainder of the semester.) The TRIO Student support Services office is located in Room 109 of the Lee Academic Center, telephone, (501) 279-4028.