PSYCHOLOGY-ZOOLOGY 550
Animal Communication and the Origins of Language

Instructor: Chuck Snowdon, 510 Psychology, 262-3974 Snowdon@wisc.edu
Office Hours: T 11-noon, R 3:45- 5:00 and by appointment,

This is a capstone course for advanced undergraduate students. I will assume a basic background in animal behavior, evolutionary biology, experimental design and statistics. The goals of the course are to provide information on all aspects of animal communication and the relationship between how animals and humans communicate. I also want you to develop the ability to read and analyze carefully and to develop your own ideas about which questions are interesting to ask in future research and how you might go about doing this research.

My conception of a course at this level is that it should be a mix of reading original research and review papers, instruction from me, and active participation by each of you in class discussions. The focus will be on critical thinking about methodology, concepts and past research to suggest new research directions. I will assume that you will have read the assignments before each class and that you will be prepared to discuss the readings and extend the discussion beyond the reading.

In addition to active participation in class discussion there are two other course requirements. There will be two in-class examinations that will be a mixture of short answer and essay questions. I will give you a set of questions from which I will draw the essay questions at least a week in advance of the exam so that you have time to think about and prepare your answers. Finally, there is a research proposal instead of a term paper. For the research proposal you will need to read in an area of interest to you (that is also relevant to the topics of the course), synthesize the research that has already been done and propose a new study or set of studies that will extend our knowledge, proposing methods for this research. This is explained in more detail on a separate handout. Each person will be scheduled to give a 15 min presentation of their research ideas to the rest of us during one of the class sessions between April 24 and May 8 and the written proposal will be due at the time of the scheduled final exam for the class. In the past some students have been apprehensive about this requirement, but in my experience most students have found this a very enjoyable process. Many students have been extremely creative developing ideas for research studies that I subsequently see in grant proposals and publications. That is, you can be as good as any professional scientist in developing novel and interesting ideas. The purpose of the oral presentation is to have you share your ideas so you gain confidence in presenting material orally and so that the rest of the class will learn from you. No matter what profession you enter, competent oral presentations and defense of ideas will be important to you.

The exams are scheduled for March 6 and April 22. Because I procrastinate in writing and in order to give you feedback early in the semester I am requiring a preliminary outline and set of readings for your research proposal by February 21. I am available to meet with each of you to talk about your ideas or to help you find a topic that is interesting. The two exams and the research proposal (oral and written components) will each count for 33.3% of the grade.
**Readings:** There is no textbook but a series of readings from primary and secondary literature. To save you money all of the readings will be available through the College Library Electronic Reserves which you can access from the Academic tab on my.wisc.edu. Go to Psych 550 and you will see a link to readings. This link may not be up by the first days of class, but it will be there soon. You can print out papers if you wish or read them on screen. Prior to each class I will email a few questions relating to the readings that I hope will be the starting point for class discussion.

**Conflicts and Accommodation:**

If you need to be absent for illness or personal reasons, please let me know in advance and I will try to be accommodating. I will keep any requests confidential.

In compliance with the Americans with Disabilities Act, I will make every effort to honor requests for reasonable accommodations made by individuals with disabilities. (If you think you qualify for accommodation, please contact the McBurney Disabilities Resource Center, 263-2741; [http://jumpgate.acadsvcs.wisc.edu/~mcburney](http://jumpgate.acadsvcs.wisc.edu/~mcburney) to establish your eligibility) Requests for accommodation can be responded to most effectively if I receive the requests early in the semester. Such requests are confidential.

Occasionally students have conflicts with instructors over grading and other matters. If these cannot be resolved by discussion with the instructor, students may appeal to the Department Chair, Joseph Newman (jpnewman@wisc.edu), Room 238 Psychology (262-1040)
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<th>Date</th>
<th>Topic and Readings</th>
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Thurs. Feb. 14  \hspace{1cm} **Functional Variation in Communication**

Tues. Feb. 19  \hspace{1cm} **Neural and Hormonal Controls**

Thurs. Feb. 21  \hspace{1cm} **Alarm and warning signals**

Outline of Research Proposal due by email ([Snowdon@wisc.edu](mailto:Snowdon@wisc.edu))

Tues. Feb. 26  \hspace{1cm} **Mating Signals and Sexual Selection**


**Essay Questions for First Exam distributed**

**Thurs. Feb. 28**

**Expression of Emotions**


**Tues. March 4**

**Crossmodal and Multimodal Communication**


**Thurs. March 6**

**First Examination**

**Tues. March 11**

**Ontogeny of Bird Song**


**Thurs. March 13**

**Ontogeny of Mammalian Vocalizations**


**Tues. March 18**  Spring Break
**Thurs. March 20**  Spring Break

**Tues. March 25**  **Ontogeny of Speech and Language**

**Thurs. March 27**  **Syntax in Animals**

**Tues. April 1**  **Semantic Communication**

**Thurs. April 3**  **Duets, Conversations and Audiences**

**Tues. April 8**  **Cognitive Precursors for Language**


**Essay Questions for Second Exam Distributed**

**Thurs. April 10**  
**Social Cognition and Communication**  


**Tues. April 15**  
**“Second Language” Learning in Parrots, Dolphins and Chimpanzees**  


**Thurs. April 17**  
**How did Language Evolve?**  


**Tues. April 22**  
**Second Examination**

**Thurs. April 24**  
Presentation of Research Proposals

**Tues. April 29**  
Presentation of Research Proposals

**Thurs. May 1**  
Presentation of Research Proposals

**Tues. May 6**  
Presentation of Research Proposals

**Thurs. May 8**  
Presentation of Research Proposals

**Mon. May 12**  
**Final Research Proposal Due 10 AM**