

Updated syllabus not available at time of Web Update. Please use this as a rough guide for 2003 course, and check back soon for new version.



Note: The syllabus and other course information below are from a previous semester. Lecture topics, dates, readings, and other assignments may be somewhat different the next time the course is offered.

Animal Cognition Seminar: G4420/W3420 (Spring,1997)

Instructor, J. Gibbon
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Wednesday 10 - 12, Room 420 Schermerhorn

The seminar in animal cognition will cover selected topics in nonverbal representational structures. Students will be expected to present one topic area verbally and write up their presentation as a short term paper. There are no examinations and no other requirements beyond participation in class meetings. A text as such will not be used, but a variety of readings will be assigned for each topic area. Resource books which will be used extensively are:

Gallistel, C. R. (1990), *The Organization of Learning*, Bradford Books/MIT Press.

Griffin, E.R. (1992), *Animal Minds*. Chicago, University of Chicago Press.

Several secondary sources will be used as well. These will be placed on reserve in the library as will the two major resource books above. One secondary source that will be used fairly frequently is: Ristau, C.A., Ed. (1991), *Cognitive Ethology: The Minds of Other Animals. Essays in Honor of Donald R. Griffin*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Students are expected to meet with the instructor during the first two or three weeks to decide upon a topic area and appropriate readings for their presentations.

Date	Topic	Readings
Jan. 22, 1997	Organizational Meeting	No reading assignments
Jan. 29	No meeting: reading period.	Gallistel, Chaps. 1 and 2, Griffin, Chapter 1
Feb. 5	Individual meetings	No additional reading
Feb. 12		
Feb. 19		
Feb. 26		
Mar. 5		
Mar. 12		
Mar. 19	Spring break	no class
Mar. 26		

Apr. 2		
Apr. 9		
Apr. 16		
Apr. 23		
Apr. 30		
May 7		

Additional lecture times will be planned according to student interests, faculty availability, and the scheduling of student talks.

Suggested Topics:

Cognition and evolution	Representation and memory: Attribute representation: time, space, order, number (subitizing)
Cognitive mechanisms in Behavioral Ecology: Foraging, caching, navigation/maps, tool use, risk sensitivity	Associative structures (blocking, attention, causation)
Kin recognition	Altruism/Cooperation
Evolution of cognition (comparative cognition)	Imitation
Self Awareness	Deception
Conceptual categorization	Reasoning
Communication and language	Decision mechanisms (choice, matching)
Directed forgetting (conditioned discrimination)	Neurobiological substrates of all the above
Mathematical models of all the above	Other relevant topic with instructor approval