

Psychology 530/808 Comparative Animal Cognition
Wed. 9:30AM-12:00 PM, Pillsbury Room, East Hall*

*Take the Elevator by Church Street to 4M

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Office Hours: Wednesday, 2:30-4:30PM, or by appointment

Description:

This seminar focuses on the cognitive abilities of animals from an evolutionary perspective, addressing questions such as: Are some animals “smarter” than others? How can you tell? Are the cognitive abilities of animals specific to certain tasks or does it make sense to talk about generalized mental abilities like intelligence? How and why do cognitive abilities evolve?

The course will begin with a brief review of evolutionary concepts and evolutionary comparative methods and then move on to specific topics relating to animal cognition. Topics will be chosen to fit student interests. Potential topics include: attention, learning, spatial cognition, numeric cognition, discrimination and classification, sexual selection and cognition, ecological and social complexity hypotheses, comparative studies of brain size, communication, language, eavesdropping, intentions and theory of mind, mirror neurons, deception, teaching and imitation, behavioral flexibility, general intelligence, consciousness.

This is a rapidly growing field and the readings will emphasize current research from the primary literature.

Course format:

The bulk of the course will be dedicated to discussing readings and the majority of the grade for the class will be based on participation in and leading discussions. Because the class is small, the discussions will be informal and tailored to the interests of the participants. In order to be prepared to discuss the readings, it is critical that you carefully read the material before the class meets.

Requirements

- 1) Participate in all discussions and lead 1 discussion topic (leaders choose papers by Friday before class)
- 3) Submit 3 questions about the readings before class (by Tuesday at 9AM)
- 4) Write a 1-page summary of each discussion (Due on Friday)
- 5) Either 10-20 page research paper or poster presentation

Grading:

Discussion participation	50%
Paper /poster	25%
Leading discussion	15%
Weekly questions/summaries	10%

Date	WK	Topic	Readings	Presenter
9/7	1	Introduction, organization	Tinbergen's 4 Questions	Thore
9/14	2	Ecological complexity	TBA	Rachel
9/21	3	Social complexity	TBA	Elizabeth
9/28	4	Language and communication	TBA	Sophia
10/5	5	Teaching and imitation	TBA	Judy
10/12	6	Sexual selection and cognition	TBA	Kendall
10/19	7	Numeric cognition	TBA	Rachel
10/26	8	Cognition and adaptation	TBA	Aaron
11/2	9	Theory of mind	TBA	Sam
11/9	10	Learning	TBA	Lisa
11/16	11	Behavioral flexibility	TBA	Juan
11/23	12	NO CLASS	THANKSGIVING	
11/30	13	Consciousness		Dan
12/7	14	Eavesdropping		Maria