HEB 30 –
PRIMATE SOCIAL BEHAVIOR
Fall 2024

COURSE INFORMATION

When: Tuesday/Thursday 10:30 AM - 11:45 AM
Where: Peabody Museum 52H
HEB req: Behavior

Instructor:

Martin Surbeck (Peabody 50D)
e-mail: msurbeck@fas.harvard.edu
Office hours: Tuesdays 1-2pm

Grader:
Lucy Wilson
email: Lucy_wilson@g.harvard.edu

COURSE OVERVIEW

This course provides an overview of primate social behavior and will cover topics such as kinship, social structure, friendship, competition, cooperation, dominance, mating systems, cognition, communication, inter-group relationships, social learning, altruism and culture. Over the course of the semester we will attempt to address fundamental questions about the *Primate* order from three perspectives:

1. *An evolutionary perspective*. How do primate species differ from one another? What are the selection pressures that account for such differences? How to explain seemingly maladaptive behaviors such as infanticide within an evolutionary framework?

2. *A primate perspective.* How do primates see the world? How do they think about others? How do social relationships affect survival? What is the nature of their relationships?

3. *A human perspective.* What are the continuities and discontinuities between human and non-human primates? What is it that sets humans apart from other primate species?

COURSE OBJECTIVES

- Explore fundamental aspects and particularities of primate social life
- Understand evolutionary mechanisms underlying this behavioral diversity

- Appreciate the links (or lack thereof) between human and nonhuman primate sociality
- Conduct research using methods from primate behavioral ecology
- Critically evaluate scientific articles, including review, empirical, and theory papers
- Effectively communicate about your own and others' research

COURSE FORMAT

Exact format will vary from lecture to lecture, but, in general, approximately 75% of the class meeting will be lecturing, and 25% will be active learning (quizzes, discussion, questions).

ASSIGNMENTS/GRADING

Quizzes (50%): There will be 8 quizzes. They will take 10 minutes and will occur at the beginning of class.

Species paper (4-5 pages) (20%): You will select a primate species and conduct a review on a specific aspect of their social behavior. Elaborate how natural or sexual selection could have favored the evolution of this trait in your species and extend what we might learn about the evolution of a similar trait in humans. There will be interactive work-groups among students to discuss ideas and we will plan individual meetings with students to ensure you are on the right track.

Harvard Yard Research Project (30%): You will conduct your own study of primate behavior in Harvard Yard. The assignment will require you to create a research question, collect data on people in their natural habitat, analyze the data, write up the results, and present the findings at the end of the semester. A detailed description and instructions for this assignment will be posted on Canvas (5% proposal, 10% oral presentation, 15% written report)

Attendance and Participation: Attendance of the lectures is required. Participation in class will be noted and if a student's final grade is on the cusp between two grades, students with an excellent record of participation may be bumped to the higher grade.

READINGS

Readings will be posted on the course's Canvas site. Readings are designed to complement lecture material. Therefore, you should come to section with questions and ready to actively participate in healthy discussions and debates about the readings.

POLICIES

Assignments/attendance: For a late assignment or missed quiz to be excused, you must provide appropriate documentation from a medical professional, and let the instructors know *before* the due date in order to make other arrangements. Unexcused late work will be penalized 10% for

each day it is late. Work should be submitted via Canvas, and you are responsible for ensuring that it has been submitted properly.

Students with disabilities: If you require particular classroom accommodations or support services, please contact the Harvard University Disability Services (https://accessibility.harvard.edu) to facilitate the necessary arrangements.

Academic integrity: We expect students to conduct themselves according to the Harvard College Student Handbook. Please carefully review the policies on academic integrity and academic dishonesty outlined here: https://handbook.fas.harvard.edu/book/academic-integrity.

SCHEDULE

Lecturer	Date	Lecture topic	Readings	Evaluations
Introduction				
MS	T 9/3	Lecture 1 **Why study primates?** **Course introduction**	Goodall (1990) Chapters 1-3	
MS	Th 9/5	Lecture 2 **Natural selection**	Radiolab Lamarck	
MS	T 9/10	Lecture 3 **Taxonomy and ecology of living primates**	Boyd & Silk (2015) *How Humans Evolved*, Chapter 5	
MS	Th 9/12	Lecture 4 **Selection pressures that shape primate societies**	*Baboon Metaphysics*, (Chapter 3)	Quiz 1 (lectures 1-3) Schedule meeting with Martin to discuss Species paper
Sexual selection				
MS	T 9/17	**Zoo visit**		

MS	Th 9/19	Lecture 5 **Sexual selection and the evolution of mating systems**	Lukas & Clutton-Brock (2013)	Primate slam
MS	T 9/24	Lecture 6 **Male competition**	Snyder-Mackler et al. (2012)	Quiz 2 (lectures 4-5)
MS	Th 9/26	Lecture 7 **Intersexual selection: male coercion**	Roberts et al. (2012)	Species paper due 9/29
MS	T 10/01	Lecture 8 **Intersexual selection: infanticide and female choice**	Roberts et al. (2012)	
Social relationships				
MS	Th 10/03	Lecture 9 **Relationships between the sexes: friendship, pair bonding, female dominance**	Langergraber et al. (2013)	Quiz 3 (lectures 6-7)
MS	T 10/08	Lecture 11 **Social relationships: What are they? Why do they matter?**	*Baboon Metaphysics* Chapters 5-6	
Communication and Cognition				
MS	Th 10/10	Lecture 12 **Social Intelligence**	*Podcast* "Are We Smart Enough to Know How Smart Animals Are?"	Quiz 4 (lectures 9-11)
MS	T 10/15	Lecture 13 **Theory of mind**	Krupenye et al. (2016) *Baboon Metaphysics* Chapter 8	
MS	Th 10/17	Lecture 14 **Social learning**	Whiten (1999)	Quiz 5 (lectures 12-13)
IS Guest	Th 10/22	Lecture 10 **Communication**	Seyfarth & Cheney (2016)	

lecture				
	T 10/24	TBD	Netflix Chimp empire	
Methods				
MS	T 10/29	Lecture 15 **Social learning**	Whitehead (2008) Chapter 3	
Cooperation				
MS	Th 10/31	Lecture 16 **Methods of behavioral data collection**	Whitehead (2008) Chapter 3	Quiz 6 (lectures 14-15)
MS	T 11/5	Lecture 17 **Cooperation in primates**	Cheney et al. (2010)	
MS	Th 11/7	Lecture 18 **Cooperative breeding**	van Schaik & Burkhart (2010) (chapter from *Mind the Gap*)	
Primate perspective on human uniqueness				
MS	T 11/12	Lecture 19 **Between-group conflicts**	Wilson et al. (2014)	Quiz 7 (lectures 16-18)
MS	Th 11/14	Lecture 20 ***Pan* model for human evolution**	Gruber and Clay (2016)	11/17 research paper outline and pilot data
MS	T 11/19	Lecture 21 **Continuities and discontinuities with humans**	Kappeler et al. (2010) (chapter from *Mind the Gap*)	Quiz 8 (lectures 19-20) 11/24 research paper
MS	Th 11/20	Lecture 22 **Primate conservation**	Virunga movie	
MS	T 11/26	Lecture 23 **Presentations of research**		

		projects		
MS	12/3	Lecture 24 **Presentations of research projects**		