– HEB 1330 –

**PRIMATE SOCIAL BEHAVIOR, Fall 2020**

**COURSE INFORMATION**

**When:** Tuesday/Thursday 10:30 - 11:45am

**Where:** harvard.zoom.us/j/93248809152

**HEB req:** Behavior

**Instructors:**

Isaac Schamberg (Peabody 51C**)** Martin Surbeck (Peabody 50D)

isaac\_schamberg@fas.harvard.edu msurbeck@fas.harvard.

Office hours: Tuesday 1-2pm Office hours: Thursday 1-2pm

Sign-up sheet: tinyurl.com/y2matwc5 Sign-up sheet: tinyurl.com/y2matwc5

Zoom link: harvard.zoom.us/j/5256777317                  Zoom link: harvard.zoom.us/j/8612712796

**COURSE OVERVIEW**

This course provides an overview of primate social behavior and cognition and will cover topics such as friendships, kinship, sex and mate choice, dominance, conflict resolution, communication, cognition, emotion, parental care, altruism, language, and culture. Over the course of the semester we will attempt to address fundamental questions about the *Primate* order from three perspectives:

1. *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. *Primate perspective*. How do primates see the world? How do they think about others? Do they have concepts? Are their vocalizations equivalent to words? What is the nature of their relationships?
3. *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 on primate social behavior 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 lecture to lecture, but, in general, approximately 60% of the class meeting will be lecturing, and 40% will be active learning (quizzes, discussion, questions).

**ASSIGNMENTS/GRADING**

**Quizzes** (40%): There will be 8 quizzes. They will take 10 minutes and will occur at the beginning of class. Students will contribute about half of the questions to these quizzes which are developed in workgroups at the end of each lecture. The quizzes will be answered in writing with the camera of the computer on and then handed in as a picture of the handwritten answers. The lowest two quiz scores for each student will be dropped when calculating final grades.

**Essays** (30%): There will be two essays in this course (summarized below). More detailed descriptions of the assignments will be available on Canvas later in the semester.

1. *Species paper* (4-5 pages) (15%): 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.
2. *Wikipedia assignment* (15%). You will choose a Wikipedia article on a primatological topic and make substantial edits to this page. See assignment description on Canvas for details.

**Behavioral Research Project** (30%): You will conduct your own study of primate behavior on the *Homo sapiens* or another species of your choiceon Youtube or another internet platform. The assignment will require you to create a research question, present your pilot data to your workgroup, collect data on people/animals, analyze the data, write up the results (15%) and present the findings first to the class (15%).

**Attendance and Participation**: Attendance of lectures is strongly preferred, but the lectures will be recorded. Participation effort 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**

· There is one required book for the course: Cheney, D.L. & Seyfarth, R.M. (2007). *Baboon Metaphysics.* Chicago, IL: The University of Chicago Press.

· All other 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** | | | | | |
| **IS** | Th  9/3 | Lecture 1  **Why study primates?**  **Course introduction** | Cheney and Seyfarth (2007) *Baboon Metaphysics*, Chapters 1-2 | |  |
| **IS** | T  9/8 | Lecture 2  **Natural selection, Tinbergen’s 4 Questions, and the comparative method** | Bateson & Laland (2013) | |  |
| **IS** | Th  9/10 | Lecture 3  **Selection pressures that shape primate societies** | *Baboon Metaphysics*, Chapter 3) | |  |
| **MS** | T  9/15 | Lecture 4  **Taxonomy and ecology of living primates** | Boyd & Silk (2015) *How Humans Evolved*, Chapter 5 | | Quiz 1 (lectures 1-3)  Schedule meeting with Martin to discuss Essay 1 |
| **Sexual selection** | | | | | |
| **MS** | Th  9/17 | Lecture 5  **Sexual selection and the evolution of mating systems** | Lukas & Clutton-Brock 2013 | |  |
| **MS** | T  9/22 | Lecture 6  **Male competition** | Snyder-Mackler et al. (2012) | | Quiz 2 (lectures 4-5) |
| **MS** | Th  9/24 | Lecture 7  **Intersexual selection: female choice, male coercion, and infanticide** | Roberts et al. (2012) | |  |
| **Social relationships** | | | | | |
| **MS** | T  9/29 | Lecture 8  **Relationships between the sexes: friendship, pair bonding, female dominance** | Langergraber et al. (2013) | | Essay 1 due |
| **IS** | Th  10/01 | Lecture 9  **Social relationships: What are they? Why do they matter?** | *Baboon Metaphysics* Chapters 5-6 | | Quiz 3 (lectures 6-8) |
| **Cognition and Communication** | | | | | |
| **IS** | T  10/06 | Lecture 10  **Social Cognition** | *Baboon Metaphysics* Chapter 7 | | Schedule meeting with Isaac to discuss Essay 2 |
| **IS** | Th  10/08 | Lecture 11  **Theory of mind** | Krupenye et al. (2016)  *Baboon Metaphysics* Chapter 8 | |  |
| **IS** | T  10/13 | Lecture 12  **Social learning** | Whiten (2012) | | Quiz 4 (lectures 9-11) |
| **IS** | Th  10/15 | Lecture 13  **Non-social cognition** | Hauser (2000) | |  |
| **IS** | T  10/20 | Lecture 14  **Communication 1** | Baboon Metaphysics Chapter 9 | | Quiz 5 (lectures 12-13) |
| **IS** | Th  10/22 | Lecture 15  **Communication 2** | Graham et al (2018) | | **First draft Wikipedia edit due 10/23** |
| **Methods** | | | | | |
| **MS** | T  10/27 | Lecture 16  **Methods of behavior** | Whitehead (2008) Chapter 3 | | Quiz 6 (lectures 14-15) |
| **Cooperation and competition** | | | | | |
| **MS** | Th  10/29 | Lecture 17  **Cooperation in primates** | Cheney et al. (2010) | | **Wikipedia Final**  **edits due 10/29** |
| **MS** | T  11/03 | Lecture 18  **Cooperative breeding** | Van Schaik & Burkhard (2010) (chapter from *Mind the Gap*) | | **Research question and methods due 11/2** |
| **MS/IS** | Th  11/05 | Presentation/discussion of Pilot results |  | |  |
| **Primate perspective on human uniqueness** | | | | | |
| **MS** | T  11/10 | Lecture 19  **Between-group conflicts** | Wilson et al. (2014) | |  |
| **MS** | Th  11/12 | Lecture 20  ***Pan* model for human evolution** | Gruber and Clay (2016) | | Quiz 7 (lectures 16-20) |
| **IS** | T  11/17 | Lecture 21  **Theories of human uniqueness 1** | TBD | |  |
| **IS** | Th  11/19 | Lecture 22  **Theories of human uniqueness 2** | TBD | |  |
| **MS/IS** | T  11/24 | Lecture 23  **Primate Conservation and wrap-up discussion** |  | | Quiz 8 (lectures 21-22) |
| **MS/IS** | T  12/1 | **Presentations of research projects 1** |  | | **Research Paper due 11/30** |
| **MS/IS** | Th  12/3 | **Presentations of research projects 2** |  | |  |