

**Human Evolutionary Biology 1330**  
**Primate Social Behavior**  
Spring Term 2017  
MWF 11-12 pm, Location: MCZ 529

**Instructors:**

Richard Wrangham, Peabody Museum 50B, [wrangham@fas.harvard.edu](mailto:wrangham@fas.harvard.edu)  
Office hrs Wed 2-3pm or by appointment

Vivek Venkataraman, Peabody Museum 50D, [vivek v venkataraman@fas.harvard.edu](mailto:vivek_v_venkataraman@fas.harvard.edu)  
Office hrs Fri 2-3pm or by appointment

**Teaching Fellow:**

Erik Scully, Peabody Museum 50E, [scully@fas.harvard.edu](mailto:scully@fas.harvard.edu) (Office hrs: by appointment)

Section times: TBD

**Course description:**

A review of the behavioral interactions in natural primate populations, drawing on experimental, observational, and theoretical studies. Discussion of ecological, physiological, and developmental bases of primate social behavior, with special attention to the evolution of patterns of behavioral interactions among individuals of different age, sex, relatedness, and status. Topics include sexual conflict, sexual selection, and mating systems; care of offspring and other aid-giving; manipulative and cooperative aspects of communication; competition, dominance, and territoriality; and the evolution of social relationships.

**Course website:**

<https://canvas.harvard.edu/courses/9924>

**Grading:**

Section Participation/Questions	15%
Midterm	20%
Assignment 1: <i>Manipulative Monkeys</i> short essay	5%
Assignment 2: Optimal Foraging for Candy	5%
Assignment 3: Human Behavior in Harvard Yard	5%
Assignment 4: Gorilla Behavior at the Franklin Park Zoo	15%
Final Exam	35%

**Readings:**

*Required Book:* Perry, S. and J. Manson. 2008. *Manipulative Monkeys: the Capuchins of Lomas Barbudal*. Cambridge, MA: Harvard University Press.

All other readings will be posted on the course website.

**Films:**

*Life: Primates*

*Gremlins: Faces in the Forest*

*Baboon Tales*

*The Human Spark*

**Midterm/Final exam:** Exams will consist of short answer, fill-in-the-blank and multiple choice questions, based on the material covered in lectures, section, readings, and films. The final exam will be cumulative. Review sessions will be held prior to the exams to allow students to ask questions about course material.

**Sections:** Attendance at your assigned weekly sections is mandatory and is worth 5% of your section grade. For an absence to be excused, you must provide appropriate documentation from a medical professional, coach, etc. Any unexcused absence will be penalized with the loss of participation points for that section and three or more unexcused absences will result in the total loss of participation points for the semester. Switching between sections is allowed only under extraordinary circumstances and only with prior permission of the section leader. Sections will include both hands-on activities and group discussions of lecture material, readings, and films. Sections are a good time to ask questions about the previous week's readings. There will be no weekly response papers, but students will be asked to complete a weekly homework assignment that is due before the start of section. These are worth 10% of your final grade and will consist of a mixture of short-answer responses to weekly prompts. They will be graded as follows:

0 = not handed in, an incorrect answer and/or no indication of careful reading/understanding of the papers

1 = handed in, some incorrect statements and/or but do not indicate careful reading or understanding of the papers

2 = handed in, correct answer and/or indicate readings were carefully read and understood (i.e. synthesize ideas across multiple papers, or point out logical flaws or omissions in logical reasoning or methodology)

Three of the section exercises will require graded write-ups. The due dates for the assignments are indicated below. Unexcused late work will be penalized 10% for every 24 hours late. Details about each of the written assignments will be provided at the beginning of the relevant activity. Section times will be announced in the first week of class.

**Field Trip:** On Saturday April 8<sup>th</sup> 2017, we will be going to the Franklin Park Zoo (with the Primate Social Behavior course from Tufts!) to collect behavioral data on a group of gorillas. Data collected by each student will contribute to a large collective dataset to be analyzed for assignment 4 (15% of your final grade). The details of this trip (including the departure times) will be announced early in the semester, but please mark this date on your calendars. If you cannot make this trip, you will need to make your own arrangements to travel to the zoo before April 16<sup>th</sup> 2016 when your data must be uploaded to the collective dataset.

**Academic Integrity**

Students are expected to conduct themselves according to the code of academic integrity outlined in the student handbook. Any work (written or otherwise) must be original. Representing the words, ideas, or concepts of another person without appropriate attribution is plagiarism. You must consult

with the instructor if you wish to submit material for this course that you have used or are using for another course. Using or attempting to use materials, information, or study aids that have not been authorized by the instructor of the course is cheating. Any form of academic dishonesty will result in failure of the assignment/exam and will be reported to the Honor Council.

### **Announcements**

The instructors will regularly communicate important course material with you via announcements on Canvas. Please ensure you receive notifications.

### **Collaboration Permitted in Written Work**

Discussion and the exchange of ideas are essential to academic work. For assignments in this course, you are encouraged to consult with your classmates on written assignments and share sources. You may find it useful to discuss written work with your peers. However, you should ensure that any written work you submit for evaluation is the result of your own research and writing and that it reflects your own approach to the topic. You must also adhere to standard citation practices and properly cite any books, articles, websites, lectures, etc. that have helped you with your work. If you received any help with your writing (feedback on drafts, etc), you must also acknowledge this assistance. For more information about academic dishonesty, please check the Handbook for Students: <http://handbook.fas.harvard.edu/book/academic-integrity>

## Course Schedule

The lecture schedule is subject to change. The lecturer is indicated in brackets after the lecture topic (RWW = Richard Wrangham, VV = Vivek Venkataraman). Sections begin the week of February 6<sup>th</sup>, 2017. Section topics for each week are listed below the week's lecture topics. The listed readings should be completed prior to the day's lecture (EPS: *Evolution of Primate Societies* (editors: Mitani et al. 2012), see reading list below for additional references). Exam dates and assignment due dates have been highlighted below.

Day	Date	Lecture Topic	Readings
M	1/23	Course overview/Introduction (RWW/VV)	Start reading <i>Manipulative Monkeys</i>
W	1/25	Humans as Primates 1 (RWW)	Wrangham & Peterson 1996 (Ch. 2)
F	1/27	Primate Diversity (VV)	Boyd & Silk Ch. 5 (up to page 126)
M	1/30	Natural selection, ecology, and behavior (VV)	Krebs & Davies 2012 (Ch. 1)
W	2/1	Sexual selection and infanticide (RWW)	EPS Ch. 19
F	2/3	Introduction to Chimpanzees (RWW)	De Waal 2005
M	2/6	Introduction to Baboons (VV)	Henzi & Barrett 2003
W	2/8	Introduction to Capuchins (RWW)	Continue reading <i>Manipulative Monkeys</i>
F	2/10	Introduction to Lemurs and Lorises (VV)	Sauther 1999
<i>Section 1: Primate Systematics</i>			
M	2/13	Movie – <i>Life : Primates</i>	Finish reading <i>Manipulative Monkeys</i>
W	2/15	Group living: predation and disease (RWW)	EPS Ch. 8
F	2/17	Group living: food (VV)	Boyd and Silk Ch. 5 (pgs. 126-143)
<i>Section 2: Optimal Foraging</i>			
M	2/20	[No Class – President's Day]	<b>Assignment 1 due via Canvas</b>
W	2/22	Socioecology (RWW)	McGraw and Zuberbuhler 2013
F	2/24	Female Bonds (RWW)	Duffy 2007
<i>Section 3: Primate Morphology</i>			
M	2/27	Male Bonds (RWW)	Silk et al. 2003
W	3/1	Dominance & Hormones (RWW)	Muller & Wrangham 2004
F	3/3	Male-Female Bonds (VV)	Nguyen et al. 2009
<i>Section 4 : Collecting Human Behavioral Data (Assignment 2 due in section)</i>			
M	3/6	Reconciliation (RWW)	Koski 2015, Webb et al. 2014
W	3/8	<b>MIDTERM</b>	
F	3/10	Movie – <i>Baboon Tales</i>	
<i>No Section; midterm review will occur before March 8<sup>th</sup> and will be announced in class</i>			

Day	Date	Lecture Topic	Readings
M	3/13	[No Class – Spring Break]	
W	3/15	[No Class – Spring Break]	
F	3/17	[No Class – Spring Break]	
M	3/20	Intergroup Aggression (RWW)	Crofoot & Wrangham 2010
W	3/22	Cooperation (VV)	EPS Ch. 22
F	3/24	Cooperative Hunting (RW)	Gilby et al. 2015
<i>Section 5: Cooperation Games</i>			
M	3/27	Sexual anatomy and mate choice (RWW)	Anderson & Dixson 2002, Nunn 1999
W	3/29	Sexual Behavior (VV)	Muller et al 2006
F	3/31	Parenting (VV)	Buchan et al. 2003, Kulik et al. 2016
<i>Section 6: Study Design (Assignment 3 due in section)</i>			
M	4/3	Cooperative Breeding (RWW)	Saltzman et al. 2009
W	4/5	Movie – Gremlins in the Forest	
F	4/7	Food Sharing (VV)	Silk et al 2013
<i>Section 7: Juveniles and Excel Activity</i>			
Sat	4/8	<i>Section 8: Field Trip to the Franklin Park Zoo</i>	
M	4/10	Juvenile behavior (VV)	Berghanel et al. 2015
W	4/12	Brains + Cognition (RWW)	Reader et al. 2011, McLean et al. 2014
F	4/14	Communication (VV)	Schel et al 2013
<i>Section 9: The Human Spark</i>			
Sun	4/16	<b>Data from field trip must be uploaded to collective dataset by 5:00pm</b>	
M	4/17	Social Learning and Culture (RWW)	Whiten et al 2005, Whiten et al 2003
W	4/19	Humans as Primates 2 (RWW)	Hare et al 2012
F	4/21	Primates and Disease (Erik Scully)	TBD
<i>Section 10: HEB 1330 Most Endangered Primates List</i>			
M	4/24	Conservation (VV)	Lonsdorf 2007
W	4/26	Overview (VV)	Wrangham & Peterson 1996 (Chs. 12-13)
F	5/5	<b>Assignment 4 due by 5:00pm</b>	

**FINAL EXAM – TBA**