

ANTH 463/563: Primate Behavior

Fall Term 2017

Credit Hours: 4

CRN: 17066 / 17238

Prerequisites: Undergraduate course(s) in primatology, biological anthropology, and/or biology, ecology, and evolution (e.g., ANTH 170, 171, 173, 270, BIO 130, 213).

Class Time and Location: Anytime and anywhere you have a web connection.

Instructor: Colin Brand

Office Hours: By appointment (in 304 Condon Hall)

Email: cbrand2@uoregon.edu

COURSE DESCRIPTION

Primates are among the most social of animals. This course uses an evolutionary approach to examine the factors important in the diversity and complexity of primate social behavior. We will examine behaviors that impact the way primates survive, succeed and reproduce in the wild. We will then critically examine the theoretical models developed to explain both the development and the patterns of distribution of these behaviors.

We will use the theoretical framework of behavioral ecology to examine hypotheses about the evolution of primate and human social behavior. This offers us a way to test ideas and ask questions such as “how is a behavior adaptive” or “what evolutionary factors have shaped a particular behavior”. During this class, we will fit this framework into the phylogenetic and biogeographic relationships of primates, and compare the behavioral diversity found with strepsirhines, tarsiers, monkeys, and apes. We will critique the value of such evolutionary theories in understanding non-human primate behavior as a whole, as well as spend some time discussing human behavior, together with some limitations and abuses of such theories.

LEARNING OBJECTIVES

1. Recognize the biological and behavioral diversity of species within the Order: Primates.
2. Understand the theoretical models that are used to explain the variation, development, and distribution of social behavior in animals, including primates.
3. Identify the costs and benefits of sociality as well as the factors that facilitate the evolution of gregariousness.
4. Acknowledge the use of primates and other species as referential models for understanding human behavior.

COURSE FORMAT

This is an online course and all lectures, assignments, essays, and exams will be completed and submitted online on the course Canvas site. Materials presented each week will largely focus on one specific topic with a dedicated module on the Canvas site that contains the topic's lecture(s) as well as additional materials including readings and videos. As this is an online course, if you have questions or seek feedback on essays and exams you must contact me via email.

GENERAL INFORMATION

Accessible Education Statement: The University of Oregon is working to create inclusive learning environments. Please notify me as soon as possible if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center in 164 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu.

Equal Opportunity Compliance Statement: It is the policy of the University of Oregon Board of Directors that there will be no discrimination or harassment on the basis of age, disability, gender, marital status, national origin, race, religion, sexual orientation, or veteran status in any educational programs, activities or employment. Persons having questions about equal opportunity and non-discrimination should contact the Office of Affirmative Action and Equal Opportunity at 541-346-3123.

Plagiarism and Academic Misconduct Statement: All work done for this course is expected to be your own, in your own words. I encourage you to be familiar with the University Student Conduct Code (available at <https://policies.uoregon.edu/vol-3-administration-student-affairs/ch-1-conduct/student-conduct-code>) which defines academic misconduct. Information about a common form of academic misconduct, plagiarism, is available at researchguides.uoregon.edu/citing-plagiarism. Please note that reusing for own work that has been previously submitted for a grade, self-plagiarism, constitutes academic misconduct. VeriCite will be used to check for plagiarism. The appearance or direct evidence of plagiarism will result in a meeting with me and may result in an "F" for the assignment or the course. If you are unsure about whether an act constitutes academic misconduct, please clarify with me before committing or attempting to commit the act.

READINGS

There are two assigned textbooks for this course which are listed below. Please note that any edition of both textbooks will suffice, just keep in mind that topics may be placed in other chapters or discussed at a reduced or greater length in other editions of the book. All other assigned readings will be posted on Canvas as pdf files. A complete list of the readings for this course can be found at the end of this document, under "Course Readings".

1. Krebs JR, Davies NB, Parr J. 2012. An introduction to behavioural ecology. Blackwell Scientific Publications. **ISBN-10:** 1405114169
2. Strier KB. 2016. Primate behavioral ecology. Routledge. **ISBN-10:** 1138954365

EXPECTATIONS AND GRADING

You are expected to listen to the course lectures and comprehend the material presented to you. Course readings and videos are required and essential to passing exams and quizzes, and completing assignments. Your final grade in this course will reflect performance on: six essays, a midterm exam, a final exam, and a term paper.

Essays	25%
Midterm Exam	20%
Final Exam	25%
Term Paper	30%

Essays: You will complete four essays for this course. These assignments are designed to provide you with the opportunity to review or critically evaluate the theory we will be reviewing. Your response should be well-written, coherently synthesize information from the module's materials, and address every component of the prompt. Each essay should be 1000 words \pm 10%. While the module will provide you with sufficient information to respond to each prompt, you are not limited to the material provided to you. As this is a 400/500 level course, I expect you to properly cite information in your response. I do not care what citation style you use but please **be consistent**.

Exams: The midterm and final exam covers materials from lectures, readings, and videos. Each exam will consist of several short answer questions of which you will choose some to answer. You will have two hours to complete each exam. As with the other written assignments in this course you should use correct in text citations, however, you do not need to produce a bibliography or references cited section for any question. The final exam is not cumulative but will focus exclusively on topics from the second half of the course. Exams will be available starting at 12 pm the Monday before their due date.

Term Paper (Undergraduates): Students will choose from a list of topics in which they will evaluate a theoretical model(s) for a particular taxonomic group. You may also propose your own if choose to do so. You will write a 10-page paper (double-spaced) organized in three parts. The first should describe the system (taxonomic group) you are studying. The second part should briefly review the model. The final part should critically examine the application of the model to that particular taxonomic group. **You may begin this assignment as soon as you would like.** While we will introduce many of the theoretical models in class, I expect you to largely draw from materials beyond the assigned readings. A thorough review and examination of your topic will likely include a considerable number of references, so please keep this in mind as you develop your paper. If you would like for me to examine a **rough draft** of your paper I am happy to do so, however, you must submit this to me by the **Friday of the seventh week**. Please consult with me early and often if you have questions about this assignment. A more detailed document describing this assignment will be posted on Canvas.

Term Paper (Graduate Students): Graduate students will write a research or review paper. Research papers may use existing, personal datasets that have not yet been substantially analyzed or a dataset can be provided to you. Research papers should include all components of a research article: introduction, methods, results, and discussion. Review papers will follow a similar format to the term paper for undergraduates. You will be expected to write 15-20 pages (double-spaced). I strongly encourage you to choose a dataset or topic that will be of future use to you (e.g. a comprehensive exam, grant, manuscript, etc.). A more detailed document outlining this assignment is available on Canvas.

Student Engagement Inventory:

	Undergraduate	Graduate
Lectures	30 hours	30 hours
Readings (~15 pgs/hr)	68 hours	68 hours
Essays	12 hours	16 hours
Midterm Prep and Exam	8 hours	8 hours
Final Prep and Exam	8 hours	8 hours
Term Paper	12 hours	30 hours
Total	138 hours	160 hours

Essays and exams must be completed the scheduled due date and time. Extensions or make-ups will not be provided without a documented excuse. If you will not be able to complete an assignment or exam by the scheduled due date and time, you must notify me in advance.

Grades will be posted to the Canvas site. It is your responsibility to check your grades regularly and to report any problems (e.g. missing credit).

Final grades will be tentatively assigned as follows: A = 90 - 100%, B = 80 - 89%, C = 70-79%, D = 60 - 69%, F < 60% (with minus and plus grades assigned at the appropriate cutoffs). These cutoffs may be changed depending on the final distribution of grades.

The grading system used in this course is as follows:

- A** - Outstanding performance relative to that required to meet course requirements, demonstrates a mastery of course content at the highest level.
- B** - Performance that is significantly above that required to meet course requirements, demonstrates a mastery of course content at a high level.
- C** - Performance that meets the course requirements in every respect, demonstrates an adequate understanding of course content.
- D** - Performance that is at the minimal level necessary to pass the course but does not fully meet the course requirements; demonstrates a marginal understanding of the course content.
- F** - Performance in the course, for whatever reason, is unacceptable and does not meet the course requirements; demonstrates an inadequate understanding of the course content.

COURSE SCHEDULE

Please note that this a tentative schedule and the topics/readings may be subject to change. Note, assignment due dates will not be modified. Any changes to topics or readings will be made at least one week in advance.

Week	Topic	Readings*	Assignments Due
1	Review of Primates, Methods in Primatology	PBE Ch 1-3, Martin and Bateson 2007; Optional: Campbell et al. 2010, Di Fiore et al. 2010, Vogel and Dominy 2010, Wheaton et al. 2010	
2	Introduction to Behavioral Ecology, Testing Evolutionary Hypotheses	IBE Ch 1-3, Gould and Lewontin 1979; Optional: Barrett and Hoekstra 2011, Bateson and Laland 2013	Essay 1 Due: 10/6 by 5 pm
3	Introduction to Socioecology, Predation	IBE Ch 4, PBE Ch 7-8, Janson 1998, Janson 2000, Thierry 2008; Optional: Crook 1970, Clutton-Brock and Harvey 1977	Essay 2 Due: 10/13 by 5 pm
4	Competition for Resources, Feeding Competition	IBE Ch 5-6, PBE Ch 6, Isbell 1991, Sterck et al. 1997; Optional: van Schaik 1989, Wrangham 1980	
5	Female and Male Strategies, Sexual Conflict	IBE Ch 8, PBE Ch 5, Stumpf et al. 2011	Midterm Due: 10/27 by 5 pm
6	Mating Systems, Alternative Breeding Strategies	IBE Ch 9-10	
7	Ontogeny, Life History	PBE Ch 9, Lonsdorf and Ross 2012	Essay 3 Due: 11/10 by 5 pm
8	Selfishness, Altruism	IBE Ch 11, PBE Ch 4, Silk 2002	Essay 4 Due: 11/17 by 5pm
9	Cooperation, Helping	IBE Ch 12, Gilby 2012, Langergraber 2012	
10	Primate Communication, Cognition, and Culture	IBE Ch 14, PBE Ch 10, Züberbulher 2012	Term Paper Due: 12/1 by 5 pm
Finals			Final Due: 12/8 by 5pm

* IBE = Introduction to Behavioral Ecology, PBE = Primate Behavioral Ecology

COURSE READINGS

Please find full bibliographic information for each of the course readings below. Note that many of these readings are optional (see above).

- Barrett RD, Hoekstra HE. 2011. Molecular spandrels: tests of adaptation at the genetic level. *Nature Reviews Genetics* 12: 767.
- Bateson P, Laland KN. 2013. Tinbergen's four questions: an appreciation and an update. *Trends in Ecology and Evolution* 28: 712-718.
- Campbell CJ, Crofoot M, MacKinnon KC, Stumpf RM. 2011. Behavioral data collection in primate field studies. In: Campbell CJ, Fuentes A, MacKinnon KC, Panger M, Bearder SK (eds) *Primates in perspective*. Oxford University Press: Oxford.
- Clutton-Brock TH, Harvey PH. 1977. Primate ecology and social organization. *Journal of the Zoological Society of London* 183: 1-39.
- Crook JH. 1970. The socio-ecology of primates. In: Crook JH (ed) *Social Behaviour in Birds and Mammals*. Academic Press: Cambridge. pp 84-96.
- Di Fiore A, Lawler RR, Gagneux P. 2011. Molecular primatology. In: Campbell CJ, Fuentes A, MacKinnon KC, Panger M, Bearder SK (eds) *Primates in perspective*. Oxford University Press: Oxford.

- Gilby IC. 2012. Cooperation among non-kin: Reciprocity, markets, and mutualism. In: Mitani JC, Call J, Kappeler PM, Palombit RA, Silk JB (eds) *The evolution of primate societies*. University of Chicago Press: Chicago.
- Gould SJ, Lewontin RC. 1979. The spandrels of San Marco and the Panglossian paradigm: a critique of the adaptationist programme. *Proceedings of the Royal Society of London B: Biological Sciences*. 205: 581-598.
- Isbell LA. 1991. Contest and scramble competition: patterns of female aggression and ranging behavior among primates. *Behavioral Ecology*. 2: 143-155.
- Janson CH. 1998. Testing the predation hypothesis for vertebrate sociality: Prospects and pitfalls. *Behaviour* 135: 389-410.
- Janson CH. 2000. Primate socio-ecology: the end of a golden age. *Evolutionary Anthropology* 9: 73-86.
- Langergraber KE. 2012. Cooperation among kin. In: Mitani JC, Call J, Kappeler PM, Palombit RA, Silk JB (eds) *The evolution of primate societies*. University of Chicago Press: Chicago.
- Lonsdorf EV, Ross SR. 2012. Socialization and development of behavior. In: Mitani JC, Call J, Kappeler PM, Palombit RA, Silk JB (eds) *The evolution of primate societies*. University of Chicago Press: Chicago.
- Martin P, Bateson P. 2007. *Measuring behaviour: an introductory guide*. Cambridge University Press: Cambridge.
- Silk JB. 2002. Kin selection in primate groups. *International Journal of Primatology* 23: 849-875.
- Sterck EHM, Watts DP, van Schaik CP. 1997. The evolution of female social relationships in nonhumans primates. *Behavioral Ecology and Sociobiology* 41: 291-309.
- Stumpf RM, Martinez-Mota R, Milich KM, Righini N, Shattuck MR. 2011. Sexual conflict in primates. *Evolutionary Anthropology* 20: 62-75.
- Thierry B. 2008. Primate socioecology, the lost dream of ecological determinism. *Evolutionary Anthropology* 17: 93-96.
- van Schaik CP. 1989. The ecology of social relationships amongst female primates. In: Standen V, Foley RA (eds) *Comparative socioecology. The behavioural ecology of humans and other mammals*. Blackwell: Oxford. pp 195-218.
- Vogel ER, Dominy NJ. 2011. Measuring ecological variables for primate field studies. In: Campbell CJ, Fuentes A, MacKinnon KC, Panger M, Bearder SK (eds) *Primates in perspective*. Oxford University Press: Oxford.
- Wheaton CJ, Savage A, Lasley BL. 2011. Advances in the understanding of primate reproductive endocrinology. In: Campbell CJ, Fuentes A, MacKinnon KC, Panger M, Bearder SK (eds) *Primates in perspective*. Oxford University Press: Oxford.
- Wrangham RW. 1980. An ecological model of female-bonded primate groups. *Behaviour* 75: 262-300.
- Zuberbühler K. 2012. Communication strategies. In: Mitani JC, Call J, Kappeler PM, Palombit RA, Silk JB (eds) *The evolution of primate societies*. University of Chicago Press: Chicago.