

Anthropology 1500: Monkeys, Apes, and Humans

Course Dates & Time

Fall/Spring
MWF

Instructor Information

Taylor Paskoff
Department of Anthropology
tmpwf4@mail.missouri.edu

Office Hours:
By appointment



Course Description & Rationale

This course will be a broad survey of the anatomy, evolution, and behaviors of the Order Primates. The primary approach to studying primate behavior in this class will be via behavioral ecology, or the evolution of behaviors due to ecological pressures. We will be looking for similarities and differences in which a variety of species of primates interact with their environments and each other. We will also strongly emphasize the study of humans as primates and learn to appreciate our own species as a member of this diverse Order.

Course Goals

1. Appreciate the role of primatology in the broad study of anthropology
2. Understand the diversity of the primate order
3. Understand general patterns of primate evolution, including adaptations to both ecological and social pressures
4. Appreciate *Homo sapiens* as a member of Order Primates, a large group of similarly adapted animals

Required Text

Strier KB. 2018. *Primate Behavioral Ecology*, 5th ed. New York, NY: Routledge.

Riley EP. 2019. *The Promise of Contemporary Primatology*. New York, NY: Routledge.

Supplementary articles will be assigned throughout the semester. Keeping up with the readings is imperative to not only success in this course, but also to expanding the scope of your knowledge in the extremely broad field of anthropology. Please find the bibliography of assigned articles and book chapters at the end of this syllabus.

Class Schedule

Week + Approx Dates	Topic	Readings	Assignment
1	Intro to anthropology & primatology	Strier 2018 (Ch 1)	
2	Principles of evolution & adaptation	Marks 2005 Lieberman 1998	
3	Taxonomy of the primates	Strier 2018 (Ch 2-3) Begun 2003 Jaeger & Marivaux 2005	
4	Human evolution	Thorpe et al. 2007	
5	Social behaviors	Strier 2018 (Ch 4)	
6	Social structure/reproductive strategies	Strier 2018 (Ch 5)	Paper 1 due
7	Male vs. female strategies	Strier 2018 (Ch 7-8) Thompson 2019	
8	Life history & demography	Strier 2018 (Ch 9) Leigh 2004	Midterm
9	Intelligence & learning	Strier 2018 (Ch 10) Roth & Dicke 2005 Fisher and Marcus 2006	Riley quizzes 1-4 due
10	SPRING BREAK – NO CLASS		
11	Tool use/communication	No reading!	Group Presentations
12	Community ecology	Strier 2018 (Ch 11)	
13	Conservation	Strier 2018 (Ch 12) Estrada et al. 2017 Nekaris and Starr 2015	
14	Violence	Gomez et al. 2016 Wilson & Wrangham 2003 Hrdy 1977	Paper 2 due
15	Genetics in primatology	Munds et al. 2018 Hopkins et al. 2014 de Manuel et al. 2016	
16	Primate infectious diseases	Young et al. 2013 Wolfe et al. 2007 Gomez et al. 2013	Riley quizzes 5-8 due Last day to turn in Extra Credit
17	FINAL EXAM 3:00pm - 5:00pm		

Assignments

Papers. In this class, there are two assigned papers: the first paper due on **xxx**, the second paper is due on **xxx** (see course schedule). Each student in the class will choose their own primate to study throughout the semester – *it may not be a human, chimpanzee, or gorilla*. You must email me your choice by **xxx**. Each paper is expected to be 3-5 pages in length and are worth up to 50 points. **Please consult “Paper Prompts” on the Canvas page early for a description of the papers.** Writing about a topic is one of the best ways to learn more about that topic; searching for and reading scholarly sources allows you to become familiar with the classic and current research being done, while analyzing or reacting to that research allows you to fine tune your critical thinking skills as well as form your own scientific opinions. *Use primary scholarly sources ONLY, such as academic journals and books. Websites are often unreliable and are therefore unacceptable sources for academic papers. Newspapers and magazine articles are also not suitable.* Use the citation style of the American Journal of Physical Anthropology (<http://libguides.ucmerced.edu/c.php?g=229259&p=1520696>; also see PDF resource on Canvas titled AJPA Style Guide).

The Promise of Contemporary Primatology quizzes. Over the course of the semester, you will be asked to read a supplementary textbook, *The Promise of Contemporary Primatology* (2019) by EP Riley. This book is meant to help you understand the role of primatology in the context of its parent field, anthropology, as well as conceptualize where primatology research and theory is headed in the future. There will be a short quiz for each chapter on Canvas, and each quiz will be worth 10 points for a total of 80 points for the entire book. All quizzes will be comprised of short answer questions, which can all be answered with careful reading of the text. Due dates for quizzes are as follows:

Riley Chapters 1-4 quizzes due: **xxx**

Riley Chapters 5-8 quizzes due: **xxx**

In-class presentation. Students will be put into groups (~2-3 people) to study the tool use and/or communication habits of one non-primate animal. There will be a full class period to work as a group on the project, and a class period dedicated to group presentations of the results. The presentations are to be no more than 10 minutes in length and are expected to cover the animal’s methods of tool use/communication as well as the adaptive advantage of those methods. Students will be graded on attendance and involvement in the project during both the group work class (10 points) and the final presentation (10 points) for a total of 20 possible points per student. **Please see the Small Group Presentation file on Canvas in the Assignments module for a full description of the assignment and associated due dates.**

Extra Credit Assignment

One of the primary goals of this class is to understand both the ecological and behavioral adaptations of a large variety of primates. One of the best ways to do this is to observe primates in their natural habitats. Unfortunately, we don’t have the ability to access primates in their *natural* habitats per se, but we can do the next best thing: visit them in the zoo. The Kansas City, St. Louis, and Springfield Zoos have excellent primate houses from the smallest of monkeys to the great apes. Travel to one of these zoos before the end of the semester and observe *at least two* different primates of your choice in their exhibits. Report your

observations back in a 2-page, double spaced paper. **Please consult “Extra Credit Prompt” on the Canvas page early for further description of the assignment.** Successful completion of this assignment will earn you up to 10 extra credit points. If you cannot for some reason make it to one of these three zoos to complete the extra credit assignment and you are in need of an alternative option, please consult with me for the alternative assignment well before the deadline (Stop Day, xxx).

Grading

Late Policy

All papers are expected to be uploaded to the Canvas website under their corresponding assignment portal before 11:59 pm on the due date. Late papers will automatically lose 3 points for each day they are late (slightly more than ½ a letter grade per day). If there are extenuating circumstances for late papers that keep you from submitting an assignment on time, please contact me prior to the due date. I reserve the right to refuse any late submissions, but I am willing to work with students who act responsibly and courteously.

Assignment and exam breakdown:

Midterm & Final (100 points each)	200 points
Papers (50 points each)	100 points
Riley chapter quizzes (10 points each)	80 points
Small group presentation (20 points)	20 points

Total 400 points

Letter grades are applied as follows:

97-100% = A+	73-76% = C
93-96% = A	70-72% = C-
90-92% = A-	67-69% = D+
87-89% = B+	63-66% = D
83-86% = B	60-62% = D-
80-82% = B-	0-59% = F
77-79% = C+	

Academic Dishonesty

Academic integrity is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person’s work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards breaches of the academic integrity rules as extremely serious matters. Sanctions for such a breach may include academic sanctions from the instructor, including failing the course for any violation, to disciplinary sanctions ranging from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, collaboration, or any other form of cheating, consult the course instructor.

Academic dishonesty includes but is not necessarily limited to the following:

- A. Cheating or knowingly assisting another student in committing an act of cheating or other academic dishonesty.
- B. Plagiarism which includes but is not necessarily limited to submitting examinations, themes, reports, drawings, laboratory notes, or other material as one's own work when such work has been prepared by another person or copied from another person.
- C. Unauthorized changing of grades or markings on an examination or in an instructor's grade book or such change of any grade report.

University of Missouri Notice of Nondiscrimination

The University of Missouri System is an Equal Opportunity/Affirmative Action institution and is nondiscriminatory relative to race, religion, color, national origin, sex, sexual orientation, age, disability or status as a Vietnam-era veteran. Any person having inquiries concerning the University of Missouri-Columbia's compliance with implementing Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, or other civil rights laws should contact the Assistant Vice Chancellor, Human Resource Services, University of Missouri-Columbia, 130 Heinkel Building, Columbia, MO 65211, (573)-882-4256, or the Assistant Secretary for Civil Rights, US Department of Education.

ADA: Students with Disabilities

If you anticipate barriers related to the format or requirements of this course, if you have emergency medical information to share with me, or if you need to make arrangements in case the building must be evacuated, please let me know as soon as possible.

If disability related accommodations are necessary (for example, a note taker, extended time on exams, captioning), please establish an accommodation plan with the MU Disability Center, S5 Memorial Union, (573)-882-4696, and then notify me of your eligibility for reasonable accommodations. For other MU resources for persons with disabilities, click on "Disability Resources" on the MU homepage.

Intellectual Pluralism

The University community welcomes intellectual diversity and respects student rights. Students who have questions or concerns regarding the atmosphere in this class (including respect for diverse opinions) may contact the departmental chair or divisional director; the director of the Office of Students Rights and Responsibilities; the MU Equity Office, or equity@missouri.edu.

Grievance Policy

Information concerning student grade appeal procedures and non-academic grievances and appeals may be found in the Student Handbook.

Bibliography

- Begun DR. 2003. Planet of the apes. *Scientific American* 289(2):74-83.
- de Manuel M, Kuhlwilm M, Frandsen P, Sousa VC, Desai T, Prado-Martinez J, Hernandez-Rodriguez J, Dupanloup I, Lao O, Hallast P, Schmidt J, et al. 2016. Chimpanzee genomic diversity reveals ancient admixture with bonobos. *Science* 354:477-481.
- Estrada A, Garber PA, Rylands AB, Roos C, Fernandez-Duque E, Di Fiore A, Nekaris A-I, Nijman V, Heymann EW, Lambert JE, Rovero F, et al. 2017. Impending extinction crisis of the world's primates: Why primates matter. *Science Advances* 3:e1600946.
- Fisher SE, Marcus GF. 2006. The eloquent ape: genes, brains and the evolution of language. *Nature Reviews Genetics* 7:9-20.
- Gomez JM, Nunn CL, Verdu M. 2013. Centrality in primate-parasite networks reveals the potential for the transmission of emerging infectious diseases to humans. *PNAS* 110:7738-7741.
- Gomez JM, Verdu M, Gonzalez-Megias A, Mendez M. 2016. The phylogenetic roots of human lethal violence. *Nature* 538:233-237.
- Hopkins WD, Russell JL, Schaeffer J. 2014. Chimpanzee intelligence is heritable. *Current Biology* 24:1659-1652.
- Hrdy SB. 1977. Infanticide as a primate reproductive strategy: conflict is basic to all creatures that reproduce sexually, because genotypes, and hence self-interests, of consorts are necessarily nonidentical. Infanticide among langurs illustrates an extreme form of this conflict. *American Scientist* 65:40-49.
- Jaeger J-J, Marivaux L. 2005. Shaking the earliest branches of anthropoid primate evolution. *Science* 310:244-245.
- Leigh SR. 2004. Brain growth, life history, and cognition in primate and human evolution. *American Journal of Primatology* 62:139-164.
- Lieberman DE. 1998. Homology and hominid phylogeny: problems and potential solutions. *Evolutionary Anthropology* 7:142-151.
- Marks J. 2005. Phylogenetic trees and evolutionary forests. *Evolutionary Anthropology* 14:49-53.
- Munds RA, Titus CL, Eggert LS, Blomquist GE. 2018. Using a multi-gene approach to infer the complicated phylogeny and evolutionary history of lorises (Order Primates: Family Lorisidae). *Molecular Phylogenetics and Evolution* 127:556-567.
- Nekaris KAI, Starr CR. 2015. Conservation and ecology of the neglected slow loris: priorities and prospects. *Endangered Species Research* 28:87-95.
- Roth G, Dicke U. 2005. Evolution of the brain and intelligence. *TRENDS in Cognitive Sciences* 9:250-257.
- Thompson E. 2019. How can non-human primates inform evolutionary perspectives on female-biased kinship in humans? *Philosophical Transactions of the Royal Society B* 374:20180074.
- Thorpe SKS, Holder RL, Crompton RH. 2007. Origin of human bipedalism as an adaptation for locomotion in flexible branches. *Science* 316:1328-1331.

GENERIC SYLLABUS

ANTHRO 1500 – pg. 7

Wilson ML, Wrangham RW. 2003. Intergroup relations in chimpanzees. *Annual Review of Anthropology* 32:363-392.

Wolfe ND, Dunavan CP, Diamond J. 2007. Origins of major human infectious diseases. *Nature Reviews* 447:279-283.

Young H, Griffin RH, Wood CL, Nunn CL. 2013. Does habitat disturbance increase infectious disease risk for primates? *Ecology Letters* 16:656-663.