

Primate Conservation Biology

ANTH 070:402:01

Spring 2017

Instructor: Dr. Erin R. Vogel

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Office Hours: Monday 2:00-4:00 or by appointment

Department Phone: 848-932-9277

Class Time: Monday and Thursday 12:35-2:00 PM

Class Location: RAB 209A

PREQS: 01:070:102 OR 204 OR PERMISSION OF INSTRUCTOR

Required Books:

1. G. Cowlshaw, and R. Dunbar. 2000. Primate conservation biology. Chicago, The University of Chicago Press. ISBN: 0-22611-637-9.
2. S.A. Wich and A.J. Marshall. (eds) 2016. An Introduction to Primate Conservation. Oxford University Press.

Recommended Book

3. E. Sterling, N. Bynum, and M. Blair. 2013. Primate Ecology and Conservation: A handbook of techniques. Oxford University Press. ISBN: 978-19-965945-6

Additional reading material (articles) for each lecture will be assigned throughout the semester and posted on Sakai.

It is important to read all assigned material **before** attending class, as much of this class is a discussion.

Course Description: This class will focus on the ecological diversity of primates and how these and other traits are related to their present day abundance and distribution. This course will introduce you to the diversity, distribution, and abundance of nonhuman primates. We will use principles from the field of conservation biology to examine the biological, abiotic and anthropogenic factors related to primate extinction risk. Specifically, we will examine the various threats facing primate populations today, the ways that scientists define and monitor threatened/endangered populations, and the steps that are being taken to increase the likelihood of their survival.

This course will be structured as a lecture on the first half of class of each week, followed by a discussion led by an individual or myself. The presenter will be responsible for sending me 2 articles **the week prior (by Tuesday)** to the leader's assigned week, and leading the discussion, but participation by all class members in each discussion is essential and comprises a large percentage of your grade. For most weeks I will post an assignment on Sakai that relates to the topic of discussion. You are expected to complete each assignment for the discussion, hand it in, and this will go towards your final grade.

Learning Goals: By the end of this course, you will be expected to:

1. Describe the defining features of primates and how these features many predispose them to extinction risks
2. Recognize the most threatened nonhuman primates, their socioecology, and the conservation issues that face them
3. Identify the trade-offs which shape the balance between the needs of local human populations and those of the nonhuman primates within a region
4. Evaluate current conservation efforts in light of species and region specific constraints
5. Propose holistic solutions to current conservation problems involving nonhuman primates
6. Students will able to demonstrate proficiency in the use critical thinking skills; demonstrate proficiency using current methods in this field, including library research skills; express themselves knowledgably and proficiently in writing and speaking about central issues in the area of primate conservation.

I do not permit the use of cell phones in my class – please turn your phone off when you come to the room.

****Please come to my office hours or email me and we can set up a meeting if you need any help with the course materials, if you need further instruction on an assignment, or if you have any questions (about the course material or about biological anthropology, in general)!****

Evaluation (Grading):

10% Participation in class discussions
20% Assignments and Group Leader Discussion
30% Mini papers (2)
20% Mid-term exam
20% Take-home **Final Exam** due on the last day of class

Class Requirements

Class Discussions and Weekly Assignments

You will become an expert for a particular primate group (several species within that group (e.g. Genus) throughout the semester. This requires you to gather various behavioral and ecological data for your particular primates. We will discuss a different topic each week and you should come prepared to discussions with information on your specific group in relationship to the topic of discussion. One person will lead the discussion each week and present 1-2 articles on the topic. Preferably, the information should be obtained from academic books (many of

which can be found in the library) and/or academic articles, which you can find online, or at the library. In addition, web sites may be used if they are associated with a professional scientific organization, museum, or university (see below). Additional web sites may be used, but you should check with me first. You need to properly cite any information you use in your assignments and hand the weekly assignment in at the end of each discussion.

The format for the weekly assignments is a double spaced, 1-2 page (at most) bulleted list of answers to the assignments I post on Sakai. You must cite your sources in the text of the bulleted points and include a references cited list at the end of your assignment. I expect you to use at least **5 primary literature sources (journal articles)**.

Attendance and Participation (missed classes and exams policy)

I will take attendance everyday as part of your grade and to help me get to know each student. Consistent attendance, participation (including noticeable evidence of having completed the assigned readings), and respectful interactions with the instructor and fellow students are essential for fostering a productive learning environment. Your contribution to the learning environment in the class includes: coming to class prepared (this means having read the readings and completed the assignments); discussing insights you have on topics for the current week; a willingness to acknowledge your areas of uncertainty and ask questions in an effort to improve your understanding; active listening and respect for others; a willingness to offer and accept constructive criticism when appropriate; and helping to keep discussions focused and on track.

Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website <https://sims.rutgers.edu/ssra/> <<https://sims.rutgers.edu/ssra/>> to indicate the date and reason for your absence. An email is automatically sent to me. If you miss a class, you will miss the discussion which you receive a grade for each week.

1. Coming to class late: I will note when you are late and this will affect your final grade if it is consistent and if you have a border-line grade this could make the difference.
2. Late assignments: Late assignments will receive a 5-point reduction for each day it is late until you receive a zero.
3. Missed exams: You will have two exams. There are no make-up exams. If you have to miss a scheduled exam, you will have to let me know why IN ADVANCE and I will assign a much more in depth writing assignment.

Mini Paper Guidelines

For your mini-papers, you will write about a specific topic (see weekly schedule) and how it relates to your primate group. You will use and cite **at least 8 primary sources** (scientific journal articles) in a **two-page, double-spaced** summary of the assigned topic, not including references. At the end of the summary, you will include the sources cited in the reference section. One internet source may be used as long as the source is reputable. **NO DIRECT QUOTES!**

Proper citation format in the body of the paper: You will need to cite the sources you use. I would prefer that you use the following formats for citations. Within the text of the paper, please use the author's last name followed by a comma and then the year. For single-authored papers, the correct citation format is, "(Rowe, 1996)." For two-authored papers, the correct citation format is "(Rossen & Olson, 2004)," and for papers written by more than two authors, "(Malpass et al., 2004)" would be appropriate. Here is an example of the three different types of citations: "In nonhuman primates, much of this work has focused on the relationship between habitat disturbance and population density (Johns, 1986; Johns & Skorupa, 1987; Chapman et al., 2000). Marshall and Wich (2002) found that population density decreased with shorter distances between villages and the forest. In the reference cited section, your references should be listed in alphabetical order.

Proper citation format in the reference section:

- For single-authored papers, the correct citation format is:

Fedigan, L.M. (1986). The changing role of women in models of human evolution. *Annual Review of Anthropology* 15: 25-66.

- For two-authored papers, the citation format is:

Smith, R.J. and Jungers, W.L. (1997). Body mass in comparative primatology. *Journal of Human Evolution* 32:523-559.

- For papers written by more than two authors, the correct citation format is:

Vogel, E.R., Knott, C.D., Crowley, B.E., Blakely, M.D., Larsen, M., and Dominy, N.J. (2012). Bornean orangutans on the brink of protein bankruptcy. *Biology Letters*. 8(3): 333-336. But cited in the text of the paper it would be Vogel et al. (2012)

- For internet resources:

National Park Service. (2002, February 11). Abraham Lincoln Birthplace National Historic Site. Retrieved October 21, 2005, from <http://www.nps.gov/abli/>

Exam Format:

The midterm and final exam will be comprised of questions including (but not limited to) multiple choice, short answer, and matching. No extra credit projects will be assigned. *Please do not hesitate to contact me with any questions or concerns throughout the semester!*

Academic Integrity and Honesty:

Academic dishonesty is a serious violation at Rutgers University. Any students who commit any of the below violations will be reported to the Office of Academic Integrity at Rutgers University. The most common forms of violations include cheating and plagiarism. I will check for both of these with EVERY assignment submitted. You cannot cut and paste information from websites, scientific papers, books, etc. Any information must be paraphrased. Visit: <http://academicintegrity.rutgers.edu/plagiarism.shtml> for any question regarding plagiarism.

Violations of academic integrity include: cheating, fabrication, plagiarism, denying others access to information or material, and facilitating violations of academic integrity.

A. Cheating

Cheating is the use of impermissible and/or unacknowledged materials, information, or study aids in any academic activity. Using books, notes, calculators, conversations with others, etc. when their use is restricted or forbidden, constitutes cheating. Similarly, students may not request others (including commercial term paper companies) to conduct research or prepare any work for them. Students may not submit identical work, or portions thereof, for credit or honors more than once without prior approval of the instructor to whom the work is being submitted for the second or subsequent time.

B. Fabrication

Fabrication is the falsification or invention of any information or citation in an academic work. "Invented" information may not be used in any laboratory report or other academic work without authorization from the instructor. It is improper, for example, to analyze one sample in an experiment and "invent" data based on that single experiment for several more required analyses. Students must also acknowledge the actual source from which cited information was obtained. A student should not, for example, reproduce a quotation from a book review and claim that the quotation was obtained from the book itself.

C. Plagiarism

Plagiarism is the representation of the words or ideas of another as one's own in any academic work. To avoid plagiarism, every direct quotation must be identified by quotation marks, or by appropriate indentation, and must be cited properly according to the accepted format for the particular discipline. Acknowledgment is also required when material from any source is paraphrased or summarized in whole or in part in one's own words. To acknowledge a paraphrase properly, one might state: to paraphrase Plato's comment... and conclude with a footnote or appropriate citation to identify the exact reference. A footnote acknowledging only a directly quoted statement does not suffice to notify the reader of any preceding or succeeding paraphrased material. Information that is common knowledge, such as names of leaders of prominent nations, basic scientific laws, etc. need not be cited; however, the sources of all facts or information obtained in reading or research that are not common knowledge among students in the course must be acknowledged. In addition to materials specifically cited in the text, other materials that contribute to one's general understanding of the subject may be acknowledged in the bibliography.

Sometimes, plagiarism can be a subtle issue. Students should be encouraged to discuss any questions about what constitutes plagiarism with the faculty member teaching the course.

D. Denying others access to information or material

It is a violation of academic integrity to deny others access to scholarly resources or to deliberately impede the progress of another student or scholar. Examples of violations of this type include giving other students false or misleading information; making library material unavailable to others by stealing or defacing books or journals; deliberately misplacing or destroying reserve materials; and altering someone else's computer files.

E. Facilitating Violations of Academic Integrity

It is a violation of academic integrity for a student to aid others in violating academic integrity. A student who knowingly or negligently facilitates a violation of academic integrity is as culpable as the student who receives the impermissible aid, even if the former student does not benefit from the violations.

If need any additional information regarding Rutgers's academic integrity policy, please visit the following links:

<http://academicintegrity.rutgers.edu/integrity.shtml>

Class Schedule - Check SAKAI for articles and info!

PCB= G. Cowlshaw, and R. Dunbar. 2000. Primate conservation biology. Chicago, The University of Chicago Press. ISBN: 0-22611-637-9.

W&M = S. Wich and A. Marshall. 2016. An Introduction to Primate Conservation. Oxford University Press.

Sterling = E. Sterling, N. Byunum, and M. Blair. 2013. Primate Ecology and Conservation: A handbook of techniques. Oxford University Press. ISBN: 978-19-965945-6

Date	Topic	Assignments
Week 1: Jan. 19	Class Introduction: Primates	Ch. 1 PCB Ch. 1&2 W&M; select a Genus
Week 2: Jan 23, 26	Living diversity and behavioral ecology What is Biodiversity? Discussion: Your species' basic info and recent behavioral studies	Ch. 2&3 PCB Ch 2 (Primack) (scanned in Sakai) Ch. 4 W&M Assignment 1 due
Week 3: Jan 30, Feb 2	Community ecology/Survey Methods Discussion: Community ecology	Ch.4 (PCB); Ch.2 (Primack) Ch 6 (W&M) Reed 1999; Kappeler and Heyman 1996 Assignment 2 due
Week 4: Feb 6, 9	Distribution, abundance, rarity Discussion: distribution, abundance, rarity Discussion: Your species' dist, abund., & rarity, and your species IUCN categories and criteria	Ch.5 (PCB); Ch 2 (Primack) Ch. 6 (W&M) Mini Paper 1 due: Your species' distribution, abundance, & rarity
Week 5: Feb 13,16	Population biology Discussion: population biology	Ch. 6 (PCB); Ch. 5 (W&M) Assigned readings No assignment this week
Week 6: Feb 20, 23	Population genetics and conservation Start Extinction Processes	Chapter 6; Chapter 7 (PCB); Ch. 5 (W&M) Assigned readings

	Discussion: population genetics and conservation	Assignment 3 due
Week 7: Feb 27, Mar 2		
Week 8: March 6, 9	<p>'MID TERM EXAM'</p> <p>Extinction processes (Lecture)</p>	Ch. 7 (PCB); Ch. 5 (Primack) (scanned- on Sakai) ; Ch. 3 (W&M)
Week 9: March 13, 16	***SPRING BREAK NO CLASS***	
Week 10: March 20, 23	<p>Habitat disturbance and climate change</p> <p>Discussion: habitat disturbance</p>	<p>Assigned readings Ch. 8 (PCB); Ch. 7 and 11 (W&M); Ch. 4 (Primack); Assigned readings</p> <p>Mini-paper 2 due: The effects of habitat disturbance on your species</p>
Week 11: March 27, 20	<p>Hunting</p> <p>Discussion: The effects of hunting on your species</p>	<p>Ch. 9 (PCB); Ch. 9 (W&M) ; Assigned readings</p> <p>Assigned readings for both topics (TBA)</p> <p>Assignment 4 due: The effects of hunting on your species</p>
Week 12: April 3, 6	<p>Part 1: The role of zoo's in primate conservation</p> <p>Part 2: Human-primate interactions: Disease and precautions</p> <p>Discussion: human-primate interactions: disease and precautions</p>	Ch. 10, 14, 15 (W&M)Assigned readings for both topics (TBA)
Week 13:		

April 10, 13	Conservation strategies Discussion: conservation strategies	Ch. 10 (PCB); Ch. 15, 16 (W&M) Assigned readings
Week 14: April 17 April 20 – no class	Conservation tactics: protected area systems, sustainable utilization	Ch.11 (PCB); Ch. 15, 16 (W&M) Ch. 16 (Sterling) Assigned readings (Assignment 5 due) Take Home Final Distributed
Week 15: April 24, 27	Conservation tactics: captive breeding, restocking and reintroduction, translocation, REDD, ecotourism Discussion: Captive breeding, restock, & reintro. possibilities with your species? Ecotourism with your species	Ch.11 (PCB); Ch. 14, 15, 16 (W&M), Assigned readings
Week 16 May 1 (last day)	Conclusions: The past and future of primate diversity Discussion: Bringing it all together: Do you have hope for the future of primate diversity? Why/why not?	Ch.12 (PCB); Ch. 17-18 (W&M) TAKE HOME FINAL DUE

This syllabus is subject to change

Useful Websites

Animal Diversity Web - University of Michigan Museum of Zoology

<http://animaldiversity.ummz.umich.edu/site/accounts/classification/Primates.html#Primates>

Wisconsin National Primate Research Center

<http://pin.primate.wisc.edu/factsheets/>

Human Ancestors Hall - Smithsonian Institution

<http://www.mnh.si.edu/anthro/humanorigins/ha/primate.html>

African Mammals Databank

<http://www.gisbau.uniroma1.it/amd/homespec.html>

Understanding Evolution
<http://evolution.berkeley.edu/>

Conservation International
<http://www.conservation.org/>

IUCN/SSC Primate Specialist Group
<http://www.primate-sg.org/>

International Species Information System
<http://www.isis.org/>

Primate Literature Database
<http://primatelit.library.wisc.edu/>

Mammal Image Library of the American Society of Mammalogists
<http://www.emporia.edu/biosci/msl/home.htm>

IUCN
<http://www.iucnredlist.org/>

World Wildlife Fund
<http://www.worldwildlife.org/science/>

World Database on Protected Areas
<http://www.unep-wcmc.org/wdpa/>

Tree of Life
<http://tolweb.org/Primates/15963>

Biology Browser - Thomson Scientific
<http://www.biologybrowser.org/bb/Organism/Chordata/Vertebrata/Mammalia/Primates/index.shtml>

Additional Recommended Books:

John G. Fleagle. 1999. Primate Adaptation and Evolution. 2nd ed. Publisher: Academic

Christina J. Campbell, Agustin Fuentes, Katherine C. MacKinnon, Melissa Panger, Simon K. Bearder. 2011. Primates in Perspective, 2nd Edition. Publisher: Oxford University Press.

Noel Rowe. 1996. The pictorial guide to the living primates. Publisher: Pogonias Press.

Walter Carl Hartwig. 2002. The primate fossil record. Cambridge ; New York: Cambridge University Press.

Strier, Karen B. 2003. Primate behavioral ecology 2nd ed.. Publisher: Allyn and Bacon.

Dean Falk. 2000. Primate diversity. Publisher: W.W. Norton.

J.G. Fleagle, C.H. Janson, K.E. Reed. 1999. Primate Communities. New York, Cambridge University Press. ISBN 0-52162-967-5.

Shawn M. Lehman and John G. Fleagle, editors. 2006. Primate Biogeography: Progress and Prospects. Publisher: Springer. ISBN: 0-38729-871-1.

James H. Brown. 1995. Macroecology. Publisher: University of Chicago Press.

Journals of Interest:

American Journal of Primatology
International Journal of Primatology
Primates
Folia Primatologica
Animal Behavior
Behavioral Ecology
Conservation Biology
PLoS One
Science
Nature
PNAS