General Information

Course Bulletin Listing/Subject Area	Anthropology
Fiscal Unit/Academic Org	Anthropology - D0711
College/Academic Group	Social And Behavioral Sciences
Level/Career	Undergraduate
Course Number/Catalog	3410
Course Title	Primate Conservation
Transcript Abbreviation	Primate Conserve
Course Description	An examination of the intrinsic and extrinsic factors putting lemurs, lorises, monkeys and apes at risk, and a critical evaluation of conservation strategies throughout their habitats.
Semester Credit Hours/Units	Fixed: 3

Offering Information

Length Of Course	14 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites	None
Exclusions	None

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	45.0201
Subsidy Level	Baccalaureate Course
Intended Rank	Sophomore, Junior, Senior

Quarters to Semesters

Quarters to Semesters Give a rationale statement explaining the purpose of the new course

Sought concurrence from the following Fiscal Units or College

New course The course fills a long standing need in our offerings and expands our curriculum on anthropological primatology.

Primate_Conservation_ANTH3410_Syllabus.doc: Anth 3410 Syllabus

Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

Content Topic List

- Students will understand the contemporary vulnerabilities and risks attendant on non-human primates, evaluate current efforts to mitigate these risks, and be capable refining or rewriting current non-human primate conservation.
- Primate taxonomy and adaptation
- Primate life history, body size, and diet.
- Primate abundance and distribution
- Hunting and habitat disturbance

(Syllabus. Owner: Freeman, Elizabeth A.)

- Commensalism
- Ethnoprimatology

Attachments

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Freeman, Elizabeth A.	01/13/2012 02:56 PM	Submitted for Approval
Approved	McGraw,William Scott	01/13/2012 02:58 PM	Unit Approval
Approved	Haddad,Deborah Moore	01/13/2012 03:48 PM	College Approval
Pending Approval	Nolen,Dawn Jenkins,Mary Ellen Bigler Meyers,Catherine Anne Vankeerbergen,Bernadet te Chantal Hogle,Danielle Nicole Hanlin,Deborah Kay	01/13/2012 03:48 PM	ASCCAO Approval

Primate Conservation: Anthropology 3410

Course Meets: Smith Lab 4012 [Monday & Wednesday, 10:05-11:55 am]

Instructor:	W. Scott McGraw
Office:	4064 Smith Laboratory
Tel:	688-3794
Email:	mcgraw.43@osu.edu

Required readings consist of two books (below) and approximately 70 additional journal articles and book chapters. All readings except the books are available on Carmen.

Books:

Bushmeat and Livelihoods (ed. G Davies and D Brown). 2007. Blackwell Publishing.

Eating Apes. By Dale Peterson. 2003. U California Press, Berkeley.

STUDENTS WITH DISABILITIES ARE RESPONSIBLE FOR MAKING THEIR NEEDS KNOWN TO THE INSTRUCTOR AS SOON AS THE QUARTER BEGINS, AND ARE RESPONSIBLE FOR SEEKING AVAILABLE ASSISTANCE FROM THE OFFICE OF DISABILITY SERVICES 292-3307, PRIOR TO OR AT THE BEGINNING OF THE OUARTER. I RELY ON THE OFFICE FOR DISABILITY SERVICES FOR ASSISTANCE IN VERIFYING THE NEED FOR ACCOMMODATIONS AND DEVELOPING ACCOMMODATION STRATEGIES.

Course content and learning objectives: Primates are among the most well-studied of groups, yet over half the world's 400 primate species are endangered and only one species – *Homo sapiens* – is increasing in number. *Why are more and more primates landing on the endangered species list despite increased efforts* – *and money* – *being directed towards their conservation?* In this class, we discuss the intrinsic (e.g., body size, phylogeny, dietary requirements) and extrinsic (e.g., hunting, habitat loss) factors that put lemurs, lorises, monkeys and apes at risk and we examine the interaction of these factors. After surveying the most endangered taxa in the Paleo and Neotropics, we examine the changing relationships – both positive and negative - between human and non-human primates in Madagascar, Africa, Asia, and Central and South America and we critically evaluate the major approaches used to conserve primates. By the end of the class, students will be able to (1) discuss those variables that put individual species at risk, (2) discuss those species at greatest risk now and those likely to become increasingly vulnerable in the near future, (3) critically evaluate current conservation initiatives, (4) evaluate the changing interaction between human and non-human primates.

Course Requirements: Your final grade will be based on four scores: three exams and a conservation report to be presented orally during our in-class symposium on primate conservation. The first exam is essentially a quiz and counts for 10% of your grade. Exams II and III each count for approximately 30% of your grade. The paper/presentation counts for approximately 30% of your grade. Exams are **not** comprehensive. If you miss an exam you have 24 hours to contact me. Official documentation is required (doctor's excuse, accident report, etc.) for make-ups. All make-up exams will be essay and must be taken within 1 week after the scheduled exam. Otherwise, the student will receive an "O" for that exam. Exams are based on course lectures, assigned readings, and class discussion. The university takes a serious view of cheating, and should any student engage in this practice during the course of any test, his/her paper will be canceled to a mark of zero, and a report will be made to the administration.

See page 10 of the syllabus for paper guidelines. All paper topics must be approved by me by **February 20th.**

Grading: Final grades will be distributed as follows: A (92-100), A- (90-91), B+ (88-89), B (82-87), B- (80-81), C+ (78-79), C (72-77), C-(70-71), D+ (68-69), D (60-67), E < 60.

SYLLABUS

January 7th (Mon) Course Mechanics & What are primates?

McGraw WS. 2010. Primates defined. In, *A Companion to Biological Anthropology*. New York: Wiley-Blackwell Publishing, pp.222-242.

Strier K. 2011. Why anthropology needs primatology. General Anthropology. 18(1):1-4.

January 9th (Wed) Primates & Their Adaptations

Nunn CL and RA Barton. 2001. Comparative methods for studying primate adaptation and allometry. *Evolutionary Anthropology* 10(3): 81-98.

January 14 th (Mon)	Extant Prosimians
January 16 th (Wed)	Extant Anthropoids
January 21 st (Mon)	No Class (MLK Jr. Day)
January 23 rd (Wed)	Exam 1

January 28th (Mon) Risk Factors: Diet, Body Mass and Life Histories

Collen B et al. 2011. Predicting how populations decline to extinction. *Phil. Trans. R. Soc.* 366:2577-2586.

Jerrnvall J and PC Wright. 1998. Diversity components of impending primate extinctions. *PNAS* 95:11279-11283.

Kamilar JM and LM Paciulli. 2008. Examining the extinction risk of specialized folivores: A comparative study of colobine monkeys. *Am J Primatology* 70:816-827.

Link A et al. 2010. Initial effects of fragmentation on the density of three neotropical primate species in two lowland forests of Colombia. *Endangered Species Research*: vol 13:41-50.

McGraw WS. 2007. Vulnerability and conservation of the Tai Forest Monkeys. In (eds. WS McGraw, K Zuberbuhler and R Noe) *The Monkeys of the Tai Forest: An African Primate Community*. Cambridge: Cambridge Univ Press, pp. 290-316.

January 30th (Wed) Risk Factors: Distribution, Abundance and Rarity

Hacker JE, G Cowlishaw and PH Williams. 1998. Patterns of African primate diversity and their evaluation for the selection of conservation areas. *Biological Conservation* 84:251-262.

Harcourt et al. 2002. Rarity, specialization and extinction in primates. *J Biogeography* 29:445-456.

Harcourt AH. 2006. Rarity in the tropics: biogeography and macroecology of the primates. J Biogeography 33(12):2077-2087.

Kamilar JM, SK Martin and AJ Tosi. 2009. Combining biogeographic and phylogenetic data to examine primate speciation: an example using Cercopithecin monkeys. *Biotropica* 41(4):514-519.

McCoogan K et al. 2007. Phylogenetic diversity and the conservation biogeography of African primates. *Journal of Biogeography* 1-13.

February (4th) (Mon) Habitat Disturbance: Dams, Logging, Mining, Ranching

Butler RA and WF Laurance. 2008. New strategies for conserving tropical forests. *TREE* 23(9):469-472.

Chapman CA and Onderdonk DA. 1998. Forests without primates: primate/plant codependency. *American J Primatology* 45(1): 127-141.

Fitzherbert EB et al. 2008. How will oil palm expansion affect biodiversity? *TREE* 23(10):538-545

Hopkin M. 2007. Mark of respect. Nature 402-403.

Lambert JA. 2011. Primate seed dispersers as umbrella species: A case study from Kibale National Park, Uganda, with implications for Afrotropical forest conservation. *American J Primatology* 73:9-24.

February 6th (Wed) Hunting and the Bushmeat Problem Part I

Bushmeat and Livelihoods. 2007. (ed G Davies and D Brown) Blackwell Publishing.

De Thoisy B et al. 2009. Impacts of subsistence game hunting on Amazonian primates. In (P Garber, ed.) *South American Primates*. Springer Science, pp. 389-412.

Golden C. 2009. Bushmeat hunting and use in the Makira Forest, northeastern Madagascar: a conservation and livelihood issue. *Oryx* 43(3): 386-391.

Kumpel N et al. 2010. Incentives for hunting: the role of bushmeat in the household economy in rural Equatorial Guinea. *Human Ecology* 38:251-264.

February 6th (Wed) Hunting and the Bushmeat Problem Part I (cont.)

Rovero F et al. 2011. Hunting or habitat degradation? Decline of primate populations in Udzungwa Mountains, Tanzania: An Analysis of threats. *Biological Conservation*. Doi. 10.1016.2011.09.016

Starin D. 2010. Revealed: How corruption and deforestation fuel horrific trade in West-African primates. *Ecologist* 16:1-4.

February 11th (Mon) Hunting and the Bushmeat Problem Part II

Golden CD et al. 2011. Benefits of wildlife consumption to child nutrition in a biodiversity hotspot. *PNAS* 108(49): 19653-19656.

Hicks TC. 2010. Trade in Orphans and Bushmeat Threatens One of The Democratic Republic of the Congo's Most Important Populations of Eastern Chimpanzees (*Pan troglodytes schweinfurthii*). African Primates 7(1):1-18.

Smith KM et al. 2012. Zoonotic viruses associated with illegally imported wildlife products. *PLoS One*: 7(1): e29505.

Wright JH and NEC Priston. 2010. Hunting and trapping in Lebialem division, Cameroon: bushmeat harvesting practices and human reliance. *Endangered Species Research* 11:1-12.

February 13th (Wed) Conservation, War and Unrest

Bonfoh B. 2011. Research in a war zone. *Nature* 474:569-571.

Hanson T et al. 2009. Warfare in biodiversity hotspots. Conservation Biology 23(3): 578-587.

Lindsell JA et al. 2011. The impact of civil war on forest wildlife in West Africa: mammals in Gola Forest, Sierra Leone. Oryx 45(1): 69-77.

February 18th (Mon) Indigenous Traditions and Ethnoprimatology

Alves R, W Souto and R Barboza. 2010. Primates in traditional and folk medicine. *Mammal Review*. 40:155-180.

Fuentes A and KJ Hockings. 2010. The ethnoprimatological approach to primatology. *American Journal of Primatology* 72:841-847.

Whiting MJ, VL Williams and TJ Hibbitts. 2011 Animals traded for traditional medicine at the Faraday market in South Africa: species diversity and conservation implications. *J Zool* 284:84-96.

February 20th (Wed) Conversation with a Poacher: Isaac Monah (Guest Speaker)

February 25th (Mon) Exam 2

February 27th (Wed) Conservation status of Malagasy primates

Jenkins RKB et al. 2011. Analysis of patterns of bushmeat consumption reveals extensive exploitation of protected species in eastern Madagascar. *PLoS One*: 6(12): e27570.

Jernvall J and PC Wright. 1998. Diversity components of impending primate extinctions. *PNAS* 95:11279-11283.

Wright PC et al. 2008. The crisis of the critically endangered greater bamboo lemur (*Prolemur simus*). *Primate Conservation* 23:5-17.

March 4th (Mon) Conservation status of New World primates

Estrada A. 2009. Primate conservation in South America: The human and ecological dimensions of the problem. In (P. Garber, ed). *South American Primates*. Springer, pp.463 – 505.

Ferrari S. 2009. Conservation of the marmosets and callimicos. In (S. Ford *et al.*, ed.) *The Smallest Anthropoids*. Springer, pp. 465-477.

March 6th (Wed) Conservation status of Old World primates I: Monkeys

Oates J, M Abedi-Lartey, WS McGraw, T Struhsaker and G Whitesides . 2000. Extinction of a West African red colobus monkey. *Conservation Biology* 14(5):1526-1532.

McGraw WS, Monah IT & Abedi-Lartey M. 1999. Survey of endangered primates in the forest reserves of eastern Cote d'Ivoire. *African Primates* 3:22-25.

McGraw WS and JF Oates. 2002. Evidence for a surviving population of Miss Waldron's Red Colobus. *Oryx.* 36(3):223.

McGraw WS. 2005. Update on the search for Miss Waldron's red colobus. *In J Primatol* 26: 605-619.

March 11th – 15th No class (Spring Break)

March 18th (Mon) Conservation status of Paleotropical primates I: Apes

Knop E, Ward PI, and Wich SA. 2004. A comparison of orangutan density in a logged and unlogged forest on Sumatra. *Biological Conservation* 120(2):183 – 188.

Peterson D. Eating Apes. 2003. University of California Press, Berkeley.

Robbins MM et al. 2010. Extreme conservation leads to recovery of the Virunga mountain gorillas. *PLoS One* 6(6):e19788.

March 20th (Wed) Primate responses to humans: commensalism, adaptive flexibility and ecological fragility

Bshary R. 2001. Diana monkeys, *Cercopithecus diana*, adjust their anti-predator response behavior to human hunting strategies. *Behav Ecol Sociobiol* 50:251-256.

Croes BM et al. 2006. The influence of hunting on anti-predator behavior in Central African monkeys and duikers. *Biotropica* 39(2): 257-263.

Marchal V and C Hill. 2009. Primate crop-raiding: a study of local perceptions in four villages in North Sumatra, Indonesia. *Primate Conservation* 24:107-116.

Riley EP and NEC Priston. 2010. Macaques in farms and folklore: Explore the human-non-human primate interface in Sulawesi, Indonesia. *Am J Primatology* 72:848-854.

Stephan C and K Zuberbuhler. 2008. Predation increases acoustic complexity in primate alarm calls. *Biology Letters*. 4:641-644.

Sterck EM. 1999. Variation in langur social organization in relation to the socioecological model, human habitat alteration, and phylogenetic constraints. *Primates* 40:199-213.

March 25th (Mon) In Situ Conservation: Parks, Hotspots and Development Projects

Campbell G et al. 2011. Long-term research sites as refugia for threatened and over-harvested species. *Biology Letters* doi:10.1098/rsbl2011:1-4.

Hill CM. 2002. Primate conservation and local communities – ethical issues and debates. *American Anthropologist* 104:1184-1194.

Marris E. 2007. What to let go. Nature. 450: 152-155.

Mittermeier et al. 1998. Biodiversity hotspots and major tropical wilderness areas: approaches to setting conservation priorities. *Conservation Bio* 12(3):516-520.

Myers N et al. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403:853-858.

March 25th (Mon) In Situ Conservation: Parks, Hotspots and Development Projects (cont.)

Oates JF. 1995. The dangers of conservation by rural development - a case study from the forests of Nigeria. *Oryx* 29(2):115-122.

Rowcliffe JM, E de Merode and G Cowlishaw. 2004. Do wildlife laws work? Species protection and the applications of a prey choice model to poaching decisions. *Proc. R. Soc. L. B.* 22; 271(1557): 2631–2636.

Wadley RL and Colfer CJP. 2004. Sacred forests, hunting, and conservation in West Kalimantan, Indonesia. *Human Ecology* 32(3):313-338.

March 27th (Wed) In Situ Conservation: Parks and Development Projects II

Same readings as March 25th.

April 1st (Mon)The Anthropology of Conservation: Eco-tourism and
Education

Bettingger T et al. 2010. Discovering the unexpected: lessons learned from evaluating conservation education programs in Africa. *Am J Primatology* 72:445-449.

Boesch C et al. 200. Chimpanzee conservation and theatre: A case study of an awareness project around the Tai National Park, Cote d'Ivoire. In (eds T Stoinski et al.) *Conservation in the 21st Century*. Springer: New York: pp. 128-135.

Custance DM, A Whiten and T Freedman. 2002. Social learning and primate reintroduction. *Int J Primatology* 23:479-499.

Dolins et al. 2010. Conservation education in Madagascar: Three case studies in the biologically diverse Island-Continent. *Am J Primatology* 72:391-406.

Jacobson SK. 2010. Effective primate conservation education: gaps and opportunities. Am J Primatology 72:414-419.

Kondgen S *et al.* 2008. Pandemic human viruses cause decline of endangered great apes. *Current Biology* 18:260-264.

Muehlenbein M and M Ancreaz. 2009. Minimizing pathogen transmission at primate ecotourism destinations: the need for input from travel medicine. *Journal of Travel Medicine* 16:229-232.

Muehlenbein et al. 2010. Unhealthy travelers present challenges to sustainable primate ecotourism. *Travel Medicine and Infectious Diseases* 8:169-175.

Nakamura M and T Nishida. 2009. Chimpanzee tourism in relation to the viewing regulations at the Mahale Mountains National Park, Tanzania. *Primate Conservation* 24:85.90.

April 1st (Mon)The Anthropology of Conservation: Eco-tourism and
Education (cont.)

Struhsaker TT, Struhsaker PJ and KS Siex. 2005. Conserving Africa's rain forests: problems in protected areas and possible solutions. *Biological Conservation* 123(1): 45-54.

Wallis J and E Lonsdorf. 2010. Summary of recommendations for primate conservation education programs. *Am J Primatology* 72:441-444.

West P and D Brockington. 2006. An anthropological perspective on some unexpected consequences of protected areas. *Conservation Biology* 20:609-616.

April 3 rd (Wed)	Ex Situ Conservation: Zoological Parks and Genetic Banks, Reintroduction, Captive Breeding
April 8 th (Mon)	Symposium on Primate Conservation
April 10 th (Wed)	Symposium on Primate Conservation
April 15 th (Mon)	Symposium on Primate Conservation
April 17 th (Wed)	Symposium on Primate Conservation

April 22nd (Mon)The Future of Primates & Review

Chapman CA and CA Peres. 2001. Primate conservation in the new millenium: the role of scientists. *Ev. Anthropol.* 10:16-33.

Mittermeier RA et al. 2009. Primates in peril: The World's 25 most endangered primates 2008-2010. *Primate Conservation* 24:1-57.

April 24th (Wed) FINAL EXAM

Guidelines for Paper and Class Presentation [Symposium on Primate Conservation]

Each student will pick a different primate species and write a "conservation report" for the species which contains the following:

- 1) general background information on the taxonomy, behavior and ecology of the species,
- 2) a review its official conservation status as determined by the IUCN,
- 3) a discussion of the major intrinsic and extrinsic threats to the species,

4) an overview of the conservation programs associated with the species (if any) and recommendations for future endeavors.

The report will be a minimum of 6 pages (excluding references) and cannot exceed 8 pages. Your primate taxon needs to be approved by me before by **February 20th**. This can be done via email or by writing your taxon on paper and submitting it to me. Your report will be a scholarly research paper based on external sources. There are many resources available to you including multiple conservation websites, books and academic journals. The OSU libraries carry many books and journals pertaining to primate conservation, and most of the key ones are also available in the Anthropology (Hughes) reading room on the 4th floor of Smith Laboratory. In addition, the great majority of recent journal articles are available via **OhioLink**, Google Scholar, etc. Among the leading journals are:

American Journal of Physical Anthropology, American Journal of Primatology, International Journal of Primatology, Folia Primatologica, Primates, , Evolutionary Anthropology, Animal Behavior, Behavior, Ethology

Each student will present their conservation report during our *Primate Conservation Symposium* to be held at the end of the class. Once all taxonomic assignments have been made, I will draw draw up a schedule so you know what day your conservation report will be presented. Each class presentation should be approximately 15 minutes in length and will be followed by a short discussion (with questions). Feel free to use visual aids (e.g. Powerpoint), but this is NOT required.

You may hand in your conservation report/paper at any time, but <u>all reports must be</u> <u>turned in no later than 11:55 am on April 17th (the last day of class presentations)</u>. You will be penalized 15 percentage points for every day your paper is late, beginning at 11:56 am on April 17th. In addition to your paper, all students must hand in one question based on their class presentation to be considered for inclusion on the final exam. Put this question on a separate piece of paper with your name on it. Be sure to attend the entire symposium!

Try and write the paper early, set it aside for a few days and read it again... critically. Give it to a friend and have him/her critique it: a well-written paper should be intelligible to someone who has not taken this class. Run the spell check. Feel free to include figures and/or tables. Come to me with questions, problems, etc: I will help in any way I can.

Paper and Class Presentation Scoring

Class Presentation (20%)

Organization Speaking Clarity Proper setting of topic Conclusion

Research Paper

(80%)

Organization of text Literature review Critical thinking Thoroughness of research Conclusions Grammar & spelling

You may hand in your paper at any time, but <u>all papers</u> <u>must be turned in no later than 11:55 am on April 17th</u> (the last day of class presentations). You will be penalized 15 percentage points for every day your paper is late, beginning at 11:56 am on April 17th. In addition to your paper, all students must hand in one question based on their class presentation to be considered for inclusion on the final exam. Put this question on a separate piece of paper with your name on it. Be sure to attend the entire symposium!