

ANTHP 310.1: Special Topics in Anthropology

African Primates: Diversity, Ecology and Conservation

Instructor: Dr. Jessica Rothman, Assistant Professor of Anthropology
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Description: The purpose of this course is to provide an experiential course in the study of primate ecology, diversity, behavior and conservation. Students will learn the features of the primates, their habitats, community dynamics, grouping strategies, communication and basic ecological features including diet, ranging and interspecific interactions. Students will learn methods to study primates in the wild by practicing them in the field. They will learn how to do primate censuses, how to categorize primate habitats according to plant species and abundance by doing vegetation plots, how to collect and press herbarium samples, and how to monitor the reproductive cycling of rainforest trees, among other methods. Students will interact closely with Uganda Wildlife Authority managers to learn how primate conservation is put into practice in Uganda.

The course will have a combination of lectures and field exercises on site in Kibale National Park, and Queen Elizabeth National Park, Uganda. Days will be divided into three parts that include a field exercise (5-6 hours), afternoon lecture (1 hour) and evening guest lecture (1 hour). The course will be supplemented with readings from research articles that should be printed before leaving the USA (about 3-4 pages per day required readings).

Assessment: Attendance and Active Participation (20%), Group Project (60%), Completion of Field Exercise Worksheets (20%)

Tentative Course Schedule

Note: Breakfast is from 7- 8 am, field exercises are typically from 8 am – 3 pm (with packed lunch), Reading and rest time is from 3 pm – 5 pm, Afternoon lectures, given by the course instructor are from 5-6 pm and Evening lectures are given by guest lectures and are 8 - 9 pm

Jan 4 – Arrival at Entebbe Airport, stay overnight at Lake Victoria Guest House

Jan 5 – Travel to Kibale National Park, get settled and organized

Evening Lecture: Logistics and Course Requirements, Data Collection

Jan 6 – Introduction Natural History of Kibale National Park. Students will be introduced to the forest through a guided tour along three transects of Kibale National Park, Uganda. On the tour students will learn about the history of the national park including its logging history, and will see at least 3 species of primates (hopefully more).

Afternoon Lecture: Primate Diversity

Evening Guest Lecture: Dr. Jerry Lwanga, Introduction to Kibale and Makerere University Field Station

Jan 7- Primate Diversity and Census Techniques. Students will learn to identify the diurnal primates in Kibale and will learn the different ways of measuring the density of primates in a forest. They will walk at 2 km transect in the forest and conduct a censuses using two different methods

Afternoon Lecture: Primate Ecology, Ranging and Diet

Evening Guest Lecture: Mr. Hillary Agaba, Research Warden, Monitoring Animals in Rainforests

Jan 8 – Primate Behavior. The objective of this exercise is to learn the different ways to estimate observe primates through focal, scan and instantaneous sampling. Students will learn when to use each method and the costs and benefits of each. The objective of this exercise is to illustrate a number of different procedures used to quantify animal behavior and to investigate the differences in the results obtained using each method.

Afternoon Lecture: Primate Behavior- Group size, and competition

Evening Guest Lecture: Mr. Richard Muhabwe – Fragmentation and edge effects on primate abundance and food quality

Jan 9 – Plant Ecology Students will learn to identify trees in the forest. Students will learn how to make a vegetation transect, and plot, and will learn the differences in tree life history strategies. They will learn how to measure primate food availability, and learn the importance of measuring phenology. Students will also collect and process herbarium specimens.

Afternoon Lecture: Conservation Strategies

Evening Guest Lecture: Mr. John Justice Tibesigwa - Crop raiding by primates: challenges and potential solutions

Jan 10 – Primate Ecotourism. Students will visit the park visitor center and track wild chimpanzees. They will learn about the behavior and ecology of our closest non-human primate relatives. During this visit, we will discuss the costs and benefits of ecotourism as they will be visiting the apes as ecotourists.

Afternoon Lecture: Developing primate field methods

Evening Guest Lecture: Mr. Chemonges Amusa, Uganda Wildlife Authority– Ecotourism in Uganda's protected areas

Jan 11 – Group Projects. Students will assemble into groups of three and design a project related to primate ecology and collect data in the field. They will test a hypothesis about primate behavior or plant ecology and use methods learned the previous days. They will develop ideas and discuss them with the instructor and then implement the methods in the field. They will conduct the project for 3 days.

Afternoon Lecture: Conservation Strategies and Protected Area Management

Evening Guest Lecture: Mr. Simplicious Gessa, Uganda Wildlife Authority – Bringing primate conservation to the Ugandan public

Jan 12 - Group Projects - Students will continue their group projects

Afternoon Lecture: Primate Disease Ecology

Evening Guest Lecture: Dr. Tony Goldberg, Professor, University of Wisconsin at Madison, Primate Ecohealth

Jan 13 - Group Projects - Students will continue group projects

Afternoon Lecture: Workshop on Data Analysis

Evening Guest Lecture: Dr. Colin Chapman, Professor, McGill University, Long term ecological research in Kibale

Jan 14 – Project Data Analysis - students will analyze their data and put it into the context of other studies. Students will develop powerpoint presentations on their group project for the following day to share with the class

No afternoon lecture

Evening Guest Lecture: Dr. Emily Oтали, Project Manager, Kibale Chimpanzee Project – Long term research on Apes

Jan 15 – Group Presentations and Rainforest Wrap Up

Jan 16 – Travel to Queen Elizabeth National Park, Mweya Sector – Pack and travel day. Stay at Uganda Wildlife Authority’s Bandas, Lectures at Tembo Canteen

Evening Lecture: Mr. Nelson Guma, Chief Warden, Diversity of Queen Elizabeth National Park

Jan 17 – Savannah primates: Diversity and behavior – Students will learn to identify primates in the savannah and conduct the same survey and behavioral methods in the savannah environment to compare and contrast these very different ecosystems.

Afternoon Lecture: Primate Community Ecology

Evening Guest Lecture: Mr. Fred Kisame, Research Officer, Uganda Wildlife Authority - resource surveying in savannah parks

Jan 18 – Savannah primates: predator-prey and interspecific interactions in relation to primate socioecology – The objective of this exercise will be to observe primate predators (lions, hyenas, leopards) and other members of savannah environments in their natural habitats to understand polyspecific associations and their costs and benefits. Students will take a boat ride.

Afternoon Lecture: Conservation in Savannah Ecosystems

Evening Guest Lecture: Mr. Fred Wanyama, Research Officer, Uganda Wildlife Authority – using aerial surveys to count wildlife and its conservation importance

Jan 19 – Depart for Entebbe – overnight in Entebbe at Lake Victoria Guest House

Jan 20 – Depart for NYC or other travel