



## **HBIO 306 – Biology of the Non-human Primates**

**Spring 2025**

**Units: 4**

**Class Period: TTH 2:00 – 3:20 pm**

**Location: Kaprielian Hall (KAP) 137**

---

**Instructor: Dr. Chrisandra Kufeldt**

Pronouns: She/Her

**Email: [kufeldt@usc.edu](mailto:kufeldt@usc.edu)**

**Office: AHF B10C, Goodall Office Suite in Basement of Hancock**

**Office hours: Tuesday 2:00 – 4:00; Wednesday 2:00 – 3:00**

---

### **Course Description**

This course evaluates behavioral ecology of the living primates and how evolution, environment, and anatomy are linked with a range of observed behaviors. Students will review natural selection and other evolutionary forces, learn primate taxonomy and systematics, evaluate the primate fossil record to understand the biological diversity of living primates and their current geographical distribution, and the connection between behavior and ecology. Students will also have direct experience collecting behavioral data and analyzing it through a semester-long research project.

### **Learning Objectives**

This is a lecture-based, active-learning course for students with a background in anthropology and biology with a focus on evolution and anatomy. As a result of completing this course, students will be able to:

- 1) Describe the role of evolutionary processes in generating modern primate anatomy.

- 2) Assess how aspects of living primate anatomy have been shaped by adaptation for diet, locomotion, and social behavior.
- 3) Plan and implement a research project.
- 4) Learn how to collect behavioral data.
- 5) Read and critique scholarly journal articles.
- 6) Conduct professional peer reviews.

## Course Notes

HBIO 200 is *strongly recommended*, or BISC 102, 104, or 120.

All course materials including syllabus, pdfs of lecture, assigned readings, grades, and assignment rubrics can be found on Brightspace. Additionally, course announcements, assignment and scheduling amendments can also be found here.

## Required Readings and Supplementary Materials

de Waal, Franz (2006). *Our Inner Ape: A Leading Primatologist Explains Why We Are Who We Are*. New York: Penguin Group Inc.

You can find this book used on Amazon or other used book sellers.

At Thrift Books ~\$4.99

<https://www.thriftbooks.com/browse/?b.search=our inner ape - b.s=mostPopular-desc&b.p=1&b.pp=50&b.oos&b.tile>

The following is *recommended* if you are interested in learning more about primate behavior but **not required**:

*Primate Behavioral Ecology*, by Karen Strier (The book is currently in its sixth edition, but any edition is acceptable). This text provides a thorough and up-to-date summary on a range of primate studies and observed behaviors.

Other required readings for each week will be posted as PDFs on Blackboard. Readings are due **on the day they are listed** in the week-by-week scheduled outline below and need to be completed before class.

## Sharing of Course Materials Outside of the Learning Environment is Strictly Prohibited

USC has a strict policy (Campus Section 11.12[B]) that prohibits sharing of *any* synchronous

and asynchronous course content outside of the learning environment. Any student who violates this policy will be prosecuted to the maximum extent allowable by the USC Student Conduct Code, including failure of the course and suspension from the University.

***2 Distribution or use of notes or recordings based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study is a violation of the USC Student Conduct Code. This includes, but is not limited to, providing materials for distribution by services publishing class notes. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the Internet or via any other media. (See Section C.1 Class Notes Policy).***

## Grading and Assessment

Participation in this course is very important since most of your grade is based on small group projects and discussions, therefore regular attendance is crucial to maintain a high grade. Grades are based on in-class activities and the semester-long research project. Every student must complete all assignments. This course requires reading, writing, and critical thinking. Grading will be done on a total point accumulated (300 points total) basis as follows:

1. Small group activities: 30%
  - a. Most of the activities for this course are centered on readings of the *required* text *Our Inner Ape*, or other assigned readings. It is important for you to keep up with the assigned readings throughout the semester.
    - i. How to Read a Paper – 15 points – Students will carefully read a peer-reviewed article to pick out the relevant and important information.
    - ii. Jigsaw – 10 points/30 total – the Jigsaw will occur three times during the semester. This activity focuses on different ways of presenting what students have learned to each other and the larger group.
    - iii. Small group presentation – 20 points/40 total – One on power and one on sex. Students will read an assigned paper and present on the topic. The work should be divided among the group.
    - iv. Case study – 15 points – Students will work in their groups to discuss and find solution to study provided.
2. Discussion: 30%
  - a. Each discussion topic is related to the semester-long required reading *Our Inner Ape*. See class schedule for due dates.
    - i. Discussion 1 – 15 points – Power.
    - ii. Discussion 2 – 15 points – Sex.
    - iii. Discussion 3 – 15 points – Violence.
    - iv. Discussion 4 – 15 points – Kindness.
3. Research Project: 40%

- a. Students will learn how to construct a research project for their final project. Students will make observations at the zoo to develop a research question, do background research on their question/topic and investigate the further steps needed to complete the project.
  - i. What is a focal follow and how to do it – 15 points – Students will learn about focal follows and how they are used to observe and collect behavioral data
  - ii. Zoo activity – 20 points – students will be given zoo tickets to spend the day observing the different primates at the zoo. There is also an activity to complete to help develop your research question.
  - iii. Research question – 10 points – students must submit their research question for approval.
  - iv. References due – 20 points – students will follow the correct citation formatting and provide a minimum of ten references that they have found to support their research question and project.
  - v. Intro draft for peer review – 25 points – the drafts will be anonymized and sent to a classmate to review the draft, making professional comments and suggestions for how that person might improve their project/paper.
  - vi. Final paper – 50 points – The final paper needs to include the response to the reviewer comments.

#### Research project:

The research project is an opportunity for students to learn how to conduct a research project from developing a research question, doing the research on what is previously known, and how you might design the remainder of the project given unlimited resources and time! Below is a timeline for the research project.

#### • January

- Review readings and lecture begin to think of topics (e.g., behaviors) or primates that are interesting to you.
- Keep track of the weather. Primates don't like cold, grey, or rain.

#### • February

- Get to the zoo and develop a research question.

#### • March

- Learn about focal follows.
- How to construct a research project.
- March 6 – research question due
- March 25 – references due

• **April**

- April 3 – Introduction draft due
  - April 17 – Peer review due
  - April 24 – presentations
- 

Final grades will be determined by the following grading scale:

94 – 100%	= A
90.0 – 93.99%	= A-
87.6 – 89.99%	= B+
84 – 87.5%	= B
80 – 83.99%	= B-
77.6 – 79.99%	= C+
74 – 77.5%	= C
70 – 73.99%	= C-
60 – 69.99%	= D
59% and below	= F

## **Note on missed or late work**

There are no make-up opportunities for late or missed work on in-class activities. If you contact me ahead of time about missing a small group activity, I will provide an alternative assignment, but this is only granted once, but you must contact me ahead of time since the schedule is available on the syllabus.

## **Classroom policies**

This is an active-learning course, and most of the course will be discussion-based. Students are expected to contribute to the discussion in every class and should be familiar with the assigned readings. Like all research, some aspects of this course will be collaborative. The goal of team-based activities is to provide students with an opportunity for clarifying their own thoughts on course material, for synthesizing multiple opinions, and for accessing more information than can be accomplished alone. The instructor will determine small groups by assignment in the second week of the course.

A few ground rules are expected to promote full participation.

- Students will silence all cell phones/tablets/laptops during class. These items are only permitted for the taking of notes and accessing course material via the course website; any other use may result in a loss of this privilege.
- To promote a respectful, professional, and productive classroom environment, the following expectations will be maintained during all class sessions

- Do not interrupt when someone else is speaking
- You can criticize ideas, but not each other
- Avoid inflammatory language
- Support assertions with evidence from lectures or readings or speak from personal experience
- Do not dominate the discussion
- Make a single point each time you speak, rather than making a series

**Sharing of Course Materials Outside of the Learning Environment is Strictly Prohibited**

USC has a strict policy (Campus Section 11.12[B]) that prohibits sharing of **any** synchronous and asynchronous course content outside of the learning environment. Any student who violates this policy will be prosecuted to the maximum extent allowable by the USC Student Conduct Code, including failure of the course and suspension from the University.

*Distribution or use of notes or recordings based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study is a violation of the USC Student Conduct Code. This includes, but is not limited to, providing materials for distribution by services publishing class notes. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the Internet or via any other media. (See Section C.1 Class Notes Policy).*

**Course Schedule**

**Please note the schedule is tentative and likely to change!**

<b><u>Week 1</u></b>		
Tuesday	January 14	Course Introduction
Thursday	January 16	Evolution Review
		<b>Readings:</b> Matsuzawa, T. 2010. Bridging laboratory and fieldwork; Moore, J., 2006. Savanna chimpanzees, referential models and the last common ancestor; <i>Primate Beh Eco</i> pg. 80 – 89; Overview of evolutionary concepts – Lewin, R., Foley, R., 2004. <i>The Principles of Evolutionary Theory</i>
<b><u>Week 2</u></b>		

Tuesday	January 21	Evolution Review
Thursday	January 23	Primate Taxonomy
		<b>Readings:</b> Chapter 1, Apes in the Family – <i>Our Inner Ape</i> ; <i>Primate Beh Eco</i> pg. 30 – 43; Groves, C. Primates (Taxonomy).
<b><u>Week 3</u></b>		
Tuesday	January 28	Primate Taxonomy and Phylogeny
Thursday	January 30	<b>Small Group Activity:</b> How to read a paper, Part 1
		<b>Readings for group assignment:</b> Tague, R.G., Lovejoy, C.O., 1986. The obstetric pelvis of A.L. 288-1 (Lucy).
<b><u>Week 4</u></b>		
Tuesday	February 4	Primate Evolution
Thursday	February 6	Primate Evolution
		<b>Reading:</b> Chapter 2 Power: Machiavelli in our blood, pages 43 – 88 – <i>Our Inner Ape</i> ; <i>Primate Beh Eco</i> pg. 59 – 64.
<b><u>Week 5</u></b>		
		<b><i>Power</i></b>
Tuesday	February 11	Social Evolution
Thursday	February 13	Dominance
		<b>Reading:</b> Chapter 2 Power: Machiavelli in our blood, pages 43 – 88 – <i>Our Inner Ape</i> .
<b><u>Week 6</u></b>		
Tuesday	February 18	<b>Small Group Discussion</b> → Power
Thursday	February 20	<b>Small Group Presentation:</b> Power
		<b>Readings:</b> Chapter 2 Power: Machiavelli in our blood, pages 43 – 88 – <i>Our Inner Ape</i> . See Brightspace for papers assigned for group presentations
<b><u>Week 7</u></b>		
		<b><i>Sex</i></b>
Tuesday	February 25	Diet
Thursday	February 27	Diet & How to read a paper Part 2

		<b>Readings for group assignment:</b> Tague, R.G., Lovejoy, C.O., 1986. The obstetric pelvis of A.L. 288-1 (Lucy). Chapter 3 Sex: Kama Sutra Primates, pages 89 – 132 – <i>Our Inner Ape</i> .
<b><u>Week 8</u></b>		
Tuesday	March 4	Focal follows and how to construct a research project
Thursday	March 6	Reproduction
		<b>Readings:</b> Altmann, J., 1974. Observational Study of Behavior: Sampling Methods; Chapter 3 Sex: Kama Sutra Primates, pages 89 – 132 – <i>Our Inner Ape</i> .
<b><u>Week 9</u></b>		
Tuesday	March 11	<b>Small Group Discussion → Sex</b>
Thursday	March 13	<b>Small Group Activity → Jigsaw – Sex</b>
		<b>Readings:</b> Chapter 3 Sex: Kama Sutra Primates, pages 89 – 132 – <i>Our Inner Ape</i> . See Brightspace for papers assigned for Jigsaw activity
<b><u>Week 10</u></b>		
Tuesday	March 18	Spring Break
Thursday	March 20	Spring Break
<b><u>Week 11</u></b>		
		<b><i>Violence</i></b>
Tuesday	March 25	Aggression
Thursday	March 27	<b>Small Group Activity → Case study – chimpanzee hunting</b>
		<b>Readings:</b>
<b><u>Week 12</u></b>		
Tuesday	April 1	<b>Small Group Discussion → Violence</b>
Thursday	April 3	<b>Small Group Activity → Jigsaw – Aggression</b>
		<b>Readings:</b> See Brightspace for papers assigned for Jigsaw activity
<b><u>Week 13</u></b>		
Tuesday	April 8	<b>Small Group Presentations → Violence in other non-human primates?</b>



Thursday	April 10	<b>Small Group Presentations</b> → Violence in other non-human primates?
		<b>Readings:</b> See Brightspace for papers assigned for presentations
<b><u>Week 14</u></b>		
		<b><i>Kindness</i></b>
Tuesday	April 15	Kindness and bonobos
Thursday	April 17	Kindness
		<b>Readings:</b> Chapter 5 Kindness: Bodies with moral sentiments – <i>Our Inner Ape</i> ;
<b><u>Week 15</u></b>		
Tuesday	April 22	<b>Small Group Discussion</b> → Kindness
Thursday	April 24	<b>Small Group Activity</b> → Jigsaw – Kindness
<b><u>Week 16</u></b>		
Tuesday	April 29	Human sociality and behavior
Thursday	May 1	Wrap-up

## **Statement on Academic Conduct and Support Systems**

### **Students and Disability Accommodations:**

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at [osas.usc.edu](http://osas.usc.edu). You may contact OSAS at (213) 740-0776 or via email at [osasfrontdesk@usc.edu](mailto:osasfrontdesk@usc.edu).

### **Support Systems:**

*Counseling and Mental Health - (213) 740-9355 – 24/7 on call*

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

*988 Suicide and Crisis Lifeline - 988 for both calls and text messages – 24/7 on call*

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

*Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL) – 24/7 on call*

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

*Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086*

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

*Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298*

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

*The Office of Student Accessibility Services (OSAS) - (213) 740-0776*

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

*USC Campus Support and Intervention - (213) 740-0411*

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

*Diversity, Equity and Inclusion - (213) 740-2101*

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

*USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call*

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

*USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call*

Non-emergency assistance or information.

*Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)*

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

*Occupational Therapy Faculty Practice - (323) 442-2850 or [otfp@med.usc.edu](mailto:otfp@med.usc.edu)*

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.