

## ANBI 133: Evolution and Ecology of the Great Apes

WLH 2208 MWF 11:00-11:50pm, Spring 2017

Professor: Dr. Marni LaFleur ; Email: [mlafleur@ucsd.edu](mailto:mlafleur@ucsd.edu)

Office: Social Sciences Building 297

Office hours: Mondays 1:00-3:00, or by appointment.

**Final Exam: Monday March 20, 11:30 am-2:30 pm, WLH 2208**

Undergraduate Instructional Apprentice: Shayla Razavi ; Email: [s1razavi@ucsd.edu](mailto:s1razavi@ucsd.edu)

Reader: Ian Jones ; Email: [iwjones@ucsd.edu](mailto:iwjones@ucsd.edu)

**Please note:** some aspects of the syllabus may change through the term. I will keep you updated as we progress.

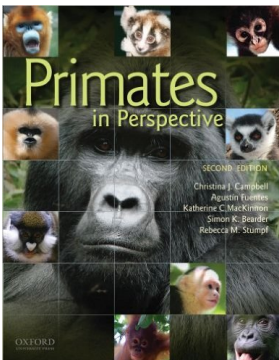
**Course Description:** the great apes are our closest living relatives and their ecology and evolution provide insights for human evolutionary history and perhaps ideas about how to co-exist with them. The course examines the natural history, behavior, ecology, and life history of each of the great apes including: orangutans, gorillas, bonobos, and chimpanzees. We will also consider conservation issues facing wild great apes, the welfare of apes in captivity, and ethical debates on ape "personhood". **Prerequisites:** upper-division standing.

The course will include lectures, discussion periods (in class time), documentary films, and field trips to the San Diego Zoo. You will have weekly background readings, and additional readings to complete before discussion periods. There will be short quizzes on readings before discussion periods. You will also need to complete reports following field trip assignments. You can come to my office hours or contact me (Marni) or Shayla (undergraduate IA) throughout the term as needed. *We can help you!* To do well in the course, you need to come to class, participate, keep up with readings, attend field trips, and complete all assignments.

Part of this course includes conducting behavioral observations of the great apes at the San Diego Zoo. For this, you will need to purchase a membership. For the best price, you should purchase an "Annual Pass Dual" with one other student, in person, and ask for the college student discount (10%). You will only be able to give one mailing address for the membership (with a ZIP code of 91900-92899), and you will have to show your student ID. If you follow these instructions the membership will cost \$75 each.



### Textbook:



*Since you already have to purchase a Zoo membership, you will not have to purchase a textbook.*

Readings will be places on TED or be available through library reserves.

Several readings will come from the following edited volume: Campbell, C., Fuentes, A., Mackinnon, K., Bearder, S., and Stumpf, R. 2011. *Primates in Perspective*, 2<sup>nd</sup> edition. Oxford University Press.

## Grades

### In class assignments (several) (10%)

Assignments will be done in-class, generally on days with discussion periods, but these are at my discretion. Depending on time constraints, these may be due immediately following the class period, or at the next class. I will make this clear to you when necessary.

### Field trip reports (4) (20%)

For these assignments you will need to attend the field trip outing, collect required data, and generate a report (which is due at the start of class on the Monday following the field trip). I will accept late assignments, but you'll lose 10% per day.

### Quizzes (5) (10%)

During Weeks 4, 5, 6, 8 and 10 I have schedule discussion periods. For these, you need to of read the assigned journal articles before class. In order to encourage you to do the readings ahead of time, there will be a short quiz at the start of class on discussion days. If you are late to class, sorry, but you missed the quiz and cannot make it up.

### Tests (2) (test 1 10%; final exam 25%)

There will be two tests throughout the term. Test 1 will be on Monday February 13 (during class) and the final exam will be on Monday March 20 (11:30 am-2:30 pm). The final exam will be cumulative, although weight towards materials covered after Test 1.

### Group term project (short proposal 2.5%, project 22.5%)

Please see the specific hand-out about the term projects for more information.

Here are a few ideas:

- Find an amazing conservation or welfare organization or researcher and review why or how their work is so cool. This will require finding someone/some group that is really interesting and probably not overly obvious. Jane Goodall is wonderful, but probably wouldn't be the most novel choice (although some of her projects might fit the bill). You will need to create a compelling presentation and short paper outlining your person/organization and situate what they are doing within the larger literature or activism.
- Conduct a scientific research project with one of the species of great apes (and/or humans) at the Zoo. This will require a significant time commitment (~3 hours per week) but can be very rewarding. You will need to generate a hypothesis, collect appropriate data, analyses the data, present research findings to the class and write a short paper summarizing your work. If you choose to do this type of project, your research will not necessarily be earth shattering, but functions more for you to understand the processes involved in behavioral research and how your work situates within the larger ape literature. If you have done behavioral work like this before, I would like you to focus on a new species for this class.
- Design or develop a way to help an ape species, and maybe even carry out your plan. You could organize a fund or awareness raising event, create a crowdsource campaign, give a



"Well, well -- another bland hair ...  
Conducting a little more 'research'  
with that Jane Goodall tramp?"

presentation to a different class or children’s group, or come up with something that you think is meaningful for your learning about apes or in some way apes themselves.

If you plan to do zoo research, you need to arrange to meet with me during the second week of class so that we can discuss the parameters of your study. **Everyone needs to have submitted a short project proposal to me by the end of week 4.** I will give you more details on what I expect for this in plenty of time.

Adding late: please note that if you add or join the course late, you cannot make-up for the content that you have missed.

Letter	Percent	GPA	Meaning	P/NP
A+	97 – 100	4.0	Excellent	Pass*
A	93 – 96.9	4.0		
A-	90-92.9	3.7		
B+	86-89.9	3.3	Good	
B	83-85.9	3.0		
B-	80-82.9	2.7		
C+	77-79.9	2.3	Fair	
C	73-76.9	2.0		
C-	70-72.9	1.7		
D	60-69.9	1	Poor	No Pass*
F	< 60	0	Fail	

### CARTA (3%) Optional

Every quarter, the Center for Academic Research and Training in Anthropogeny (CARTA) hosts a symposium. This term’s symposium examines the awareness of death and personal mortality. You can attend the symposium in-person or live-stream the content, BUT you cannot watch the talks after they stream, so you must be able to attend/watch at the time that it happens (March 3<sup>rd</sup>, 1:00-5:30 pm). Before attending or streaming, you must register with CARTA. All the information is available on the website: <https://carta.anthropogeny.org/>

If you attend, you have the option of writing short synopses from three of the talks (you choose which 3) and submitting these to me by Sunday March 5<sup>th</sup> at 5pm. This will earn you up to a 3% bonus in your final grade. Please create a word document and name the file your first and last name and “CARTA”. So, if I were submitting a CARTA assignment, my file name would be “Marni LaFleur CARTA”. Please also use your file name as the subject of your email.



If you cannot attend or miss the talks for any reason, you cannot make up these bonus points. This is the only bonus opportunity. CARTA symposia are very interesting and this is a good way increase your final score in the course- it usually makes the difference of a letter grade!

### UCSD Celebrates World Bonobo Day (1%) optional

Please look at the “UCSD Celebrates World Bonobo Day” for details about the event which will take place on Feb 14, 2017 beginning at 5:30pm.

## **SCHEDULE**

### WEEK 1

Topics: I will be away for the first week of class, but Kari Hanson (Anthropology Ph.D. candidate, extraordinaire) will introduce you to the course and play the film Virunga in class. The movie is exactly 2 class periods long, but we will break it up over three days. You will need to do a short written assignment based on the movie. Kari does very interesting research on human and ape brain evolution- you should ask her about her research, or her rats.

Readings: You can get started on reading Chapters 1-2 from Primate Behavioral Ecology (Karen B Strier). It should be in course reserves as a pdf file.

**January 9:** Syllabus, instructions for getting a San Diego Zoo membership, and assignment instructions for Virunga. Begin movie.

**January 11:** Virunga, continued.

**January 13:** Virunga, continued.

### WEEK 2

Topics: Intro to great apes and primate behavioral ecology.

Readings: Same reading form last week (its long). Primate Behavioral Ecology (Karen B Strier), Chapters 1-2.

Items DUE: Virunga assignment due at the beginning of class on January 18<sup>th</sup>. Be sure that you have typed your assignment and bring a paper copy to me.

**January 16:** NO CLASS. MLK Day.

**January 18:** Introduction to primates and great ape studies, lecture.

**January 20:** Primate behavioral ecology, lecture.

### WEEK 3

Topics: Measuring behavior, orangutans, and zoo visit

Readings: Primates in Perspective Chapters 21 (Methods) and 18 (Orangutans).

**January 23:** Measuring behavior, lecture and in-class assignment.

**January 25:** Orangutans 1, lecture.

**January 27:** Zoo trip 1.

### WEEK 4

Topics: Orangutans, cont.



Readings: Orangutan journal articles (listed at the end of the syllabus), Primates in Perspective Chapter 19 (Gorillas).

Items DUE: Zoo trip 1 assignment due at the start of class on January 30. **Short project proposal due by Sunday February 5<sup>th</sup> at midnight.**

**January 30**: Orangutans 2, discussion and in-class assignment.

**February 1**: Orangutan 3, video

**February 3**: Gorillas 1, lecture

#### WEEK 5

Topics: Gorillas, cont.

Readings: Gorilla articles (listed at the end of the syllabus).

Items DUE: **Short INSPIRED project proposal due by Sunday February 12<sup>th</sup> at midnight.**

**February 6**: Gorillas 2, finish lecture and in-class discussion of term projects.

**February 8**: Gorillas 3, in-class discussion and assignment.

**February 10**: Zoo trip 2.

#### WEEK 6

Topics: Test 1, Bonobos.

Readings: Primates in Perspective Chapter 20 (Chimpanzees and bonobos).

Items DUE: Zoo trip 2 assignment due at the beginning of class on Feb 15.

**February 13**: TEST 1 (on material covered up to this point; Chimpanzee/bonobo readings not on test).

**\*NOTE\* Feb 14<sup>th</sup> is World bonobo day! Attend UCSD Celebrates World Bonobo Day and receive 1% bonus on your final class score 😊**

**February 15**: Bonobos 1, lecture.

**February 17**: Special Guest Lecture with Ashley Stone.

#### WEEK 7

Topics: Bonobos, cont.

Readings: Bonobo articles (listed at the end of the syllabus).

**February 20**: NO CLASS. Presidents' Day.

**February 22**: Bonobo 3, quiz, discussion, and/or video.

**February 24**: Zoo trip 3.

#### WEEK 8

Topics: Chimpanzees.

Readings: Chimpanzee articles (listed at the end of the syllabus).

Items DUE: Zoo trip 3 assignment due at the beginning of class on Feb 27. Group presentation slides due by Sunday March 5<sup>th</sup> at midnight.

**February 27**: Chimpanzees 1, lecture.



**March 1:** Chimpanzee 2, quiz, lecture continued and videos.  
**March 3:** Chimpanzee 3, quiz, discussion and in-class assignment.  
NOTE: CARTA is on March 3<sup>rd</sup> at 1:00 pm.

#### WEEK 9

Topics: Student Presentations.

Readings: None.

**March 6 and 8:** Student Presentations.

**March 10:** Zoo trip 4.

#### WEEK 10

Topics: Current issues in conservation and captivity.

Readings: TBD. I will add these later in the term, as topics emerge.

Items DUE: Zoo trip 4 assignment due at the beginning of class on March 13<sup>th</sup>.

**March 13:** Current issues, lecture.

**March 15:** Current issues, quiz, discussion and in-class assignment.

**March 17:** Future of great apes and class wrap-up.



Readings: Primate Behavioral Ecology Chapters 1-2, Primates in Perspective Chapters 18-21.

Orangutan journal articles:

1. Ancrenaz, Marc, et al. "Of Pongo, palms and perceptions: a multidisciplinary assessment of Bornean orang-utans *Pongo pygmaeus* in an oil palm context." *Oryx* 49.03 (2015): 465-472.
2. Banes, Graham L., Biruté MF Galdikas, and Linda Vigilant. "ORIGINAL ARTICLE Male orang-utan bimaturism and reproductive success at Camp Leakey in Tanjung Puting National Park, Indonesia." (2014).
3. Hardus, Madeleine E., et al. "Behavioral, ecological, and evolutionary aspects of meat-eating by Sumatran orangutans (*Pongo abelii*)." *International journal of primatology* 33,2 (2012): 287-304.

Gorilla journal articles:

1. Robbins, Martha M., et al. "Extreme conservation leads to recovery of the Virunga mountain gorillas." *PloS one* 6.6 (2011): e19788.
2. Shutt, Kathryn, et al. "Effects of habituation, research and ecotourism on faecal glucocorticoid metabolites in wild western lowland gorillas: Implications for conservation management." *Biological Conservation* 172 (2014): 72-79.
3. Lukas, Kristen E. "A review of nutritional and motivational factors contributing to the performance of regurgitation and reingestion in captive lowland gorillas (*Gorilla gorilla gorilla*)." *Applied animal behaviour science* 63.3 (1999): 237-249.

Bonobo journal articles:

1. Miller, Lance J., and Jennifer R. Tobey. "Regurgitation and reingestion in bonobos (*Pan paniscus*): Relationships between abnormal and social behavior." *Applied Animal Behaviour Science* 141.1 (2012): 65-70.
2. Tokuyama, Nahoko, et al. "Cases of maternal cannibalism in wild bonobos (*Pan paniscus*) from two different field sites, Wamba and Kokolopori, Democratic Republic of the Congo." *Primates* 58.1 (2017): 7-12.
3. (Book Chapter) Furuichi, Takeshi, Richard Connor, and Chie Hashimoto. "Non-conceptive conceptive sexual interactions in monkeys, apes, and dolphins." *Primates and cetaceans*. Springer Japan, 2014. 385-408.

Chimpanzee journal articles:

1. Wilson, M. L., Boesch, C., Fruth, B., Furuichi, T., Gilby, I. C., Hashimoto, C., ... & Lloyd, J. N. (2014). Lethal aggression in Pan is better explained by adaptive strategies than human impacts. *Nature*, 513(7518), 414-417.
2. Rushmore, Julie, et al. "Screening wild and semi-free ranging great apes for putative sexually transmitted diseases: Evidence of Trichomonadidae infections." *American journal of primatology* 77.10 (2015): 1075-1085.
3. Kühl, Hjalmar S., et al. "Chimpanzee accumulative stone throwing." *Scientific reports* 6 (2016).

Current Issues journal articles:

TBA