

Department of Anthropology  
Anthropology 2265F-001: Primate Behavior  
Course Outline  
Fall 2016

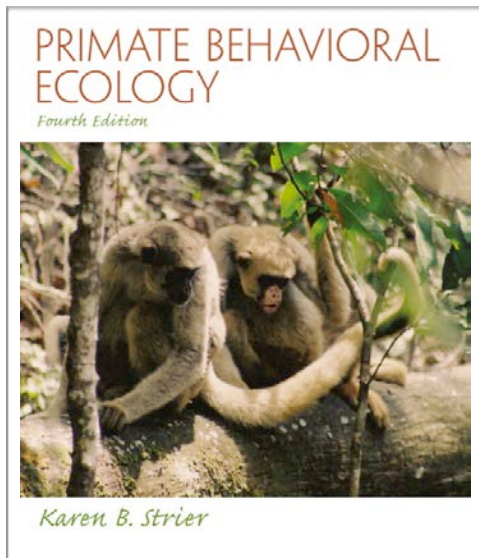
**Class Time:** Tues. 2:30-5:20 PM  
**Class Room:** SSC 2257

**Instructor:** Dr. Ian Colquhoun  
**Office:** SSC 3428  
**E-mail:** [colquhou@uwo.ca](mailto:colquhou@uwo.ca)  
**Office Hours:** Tues. 10:30-11:30 AM  
**Office Phone:** 519-661-2111 x 85061

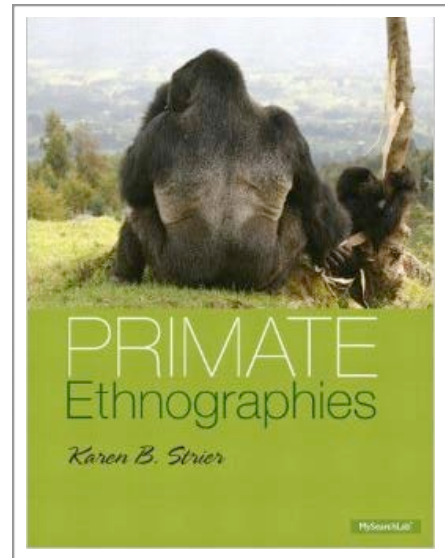
**TA:** Fernando Mercado  
SSC 3426  
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Mon. & Thurs. 1:00-2:00 PM

**Prerequisite:** The prerequisite for Anthropology 2265G is *at least 0.5 Essay course in Social Science or Arts and Humanities*; there is no anti-requisite to this course.

**Required Text:** The required texts are:



Strier, Karen B. 2011. *Primate Behavioral Ecology* (fourth edition). Pearson/Prentice-Hall, Upper Saddle River, New Jersey.



Strier, Karen B. (ed.) 2014. *Primate Ethnographies* (first edition). Pearson Education, Inc. Upper Saddle River, New Jersey.

**Course Description:**

The Order Primates is composed of some 500, or more, species... and counting. The exact number of species, however, remains unknown -- primate species that are “new” to science are still being “discovered”! The objective of this course is to introduce you to both the behavioral patterns and the remarkable behavioral diversity across the recognized taxonomic groups of primate species (i.e., genera and families), within the Order Primates. As a starting point, we will consider just how we biologically define what it is we recognize as a primate. The methodologies employed in primate studies will also be considered. Other topics introductory to the course will include an overview and brief survey of the taxonomy of the Order Primates.

Because it is not feasible to attempt a species-by-species survey of behavior, we will utilize a thematic approach to examining primate behavior. Through the various topic areas (e.g., ecological and social contexts of behavior, reproduction, growth and development, kinship and dominance, communication and cognition), a comparative perspective across species will be employed. The entire inspection of primate behavior will be rooted in contemporary evolutionary theory, with a particular stressing of socioecological approaches to the analysis and understanding of primate behavior; the conservation of nonhuman primate populations will constitute an underlying theme to the course.

### Learning Outcomes:

Students who successfully complete Anthropology 2265F, "Primate Behavior", will:

- be able to identify broad patterns in the behavioural ecology of species across the Order Primates;
- be conversant in the broad patterns of the fossil record of primate evolutionary history;
- appreciate the ways in which Life History Theory applies to the growth, development, and reproduction of nonhuman primate species as it also does to other K-selected (i.e., larger-bodied) mammal species;
- recognize the key importance of sociality as an adaptation in the behavioural ecology of nonhuman primates, and major ways in which patterns of primate behavioural ecology vary across primate species;
- be familiar with how one can take the key ecological variables of activity pattern, feeding ecology, social group structure and composition, and dispersal patterns, and combine these to characterize the broad behavioural ecology patterns of major taxonomic groups (i.e., taxonomic Families and Genera) within the Order Primates;
- understand why it is crucially important for field primatologists to work with local communities in primate habitat countries to advance primate conservation efforts; and,
- comprehend why, and the ways in which, an understanding of primate behavioural ecology is an essential aspect to efforts for the conservation of nonhuman primate species.

### Student Evaluation:

Course requirements (aside from weekly attendance of lectures) will include:

- a mid-term examination (**20%** of final grade) -- Tues., Oct. 25th (written in class);
- a final examination (**35%** of final grade) -- scheduled in the December exam period (Sat., Dec. 10th -- Wed., Dec. 21st) by the Office of the Registrar;
- three short written assignments (**15%** each, for a total of **45%** of final grade; due dates: Oct. 18<sup>th</sup>, Nov. 8<sup>th</sup>, and Nov. 29<sup>th</sup>).

The **first two written assignments** will be brief, 3-5 page **summary and critical commentary pieces that each focus on a recently published primate behavior study in a peer-reviewed academic journal** (the source does not necessarily have to be a primatological journal, as primatological research is also frequently published in academic journals that focus on biological anthropology, biology, or ecology). Possible topics span the range of material covered in this course – for example: allo-mothering in colobine monkeys; vigilance and predator avoidance behaviors in marmosets and tamarins; extractive foraging behavior and cognitive abilities in orangutans. For an excellent example of how to combine both summary and critical commentary perspectives in a short composition, see: Dunbar, R. I. M. (2001). "Evolutionary biology: What's in a baboon's behind?". *Nature* **410** (6825): 158. [doi:10.1038/35065773](https://doi.org/10.1038/35065773). The **third assignment** will be a prospective (i.e., forward-looking) annotated itemization in which you draw on the material we have covered in the course, and the material that you have read, to produce a listing of what you propose, looking ahead, to be the "*Top 10 Big Questions in Primatology*" (**see further details on the written assignments at the end of the syllabus**).

**Assignments that are not submitted on the due dates will be assessed a late penalty of -2 marks per day** (e.g., a paper that is two days late will have a late penalty of -4 and receive a grade out of 11 marks rather than 15). Avoid handing in late assignments as the late penalty can quickly pile up!

**\*NB: Because Anthropology 2265F is considered an "essay course", you must complete and submit the three written assignments in order to earn academic credit for this course. NO DEADLINE EXTENSIONS WILL BE GRANTED.** So, to avoid a grade penalizations on your written assignments, avoid submitting them late! However, submitting a late written assignment is certainly better than not submitting a paper at all! The **only possible exceptions** to the late penalty and no extension rules are cases in which compelling medical or

compassionate grounds can be documented, and where academic accommodation may be allowed. Students should consult the University's "Policy on Accommodation for Medical Illness" (<https://studentservices.uwo.ca/secure/index.cfm>), and the "Academic Rights and Responsibilities" section of the Western Academic Calendar (<http://www3.registrar.uwo.ca/calendars/index.cfm>) for further details. Or, students should consult the Academic Counselling Office in their "home" Faculty in the event of illness, family emergency, or other personal difficulties that constitute "extenuating circumstances".

Both the mid-term and final exams will utilize a "mixed format" presentation of questions (i.e., both tests will include multiple choice, fill-in-the-blank, and short answer questions); the final exam will **not** be cumulative. Material covered on the exams will come from both lectures and the readings, but lecture material will be emphasized. Lectures will include material that is **not covered** in the course text (a good reason to always attend class!).

### Academic Policies:

All students should familiarize themselves with Western's current academic policies regarding accessibility, plagiarism and scholastic offences, and medical accommodation. These policies are outlined (with links to the full policies) at: [http://anthropology.uwo.ca/undergraduate/course\\_information/academic\\_policies.html](http://anthropology.uwo.ca/undergraduate/course_information/academic_policies.html)

### Additional Statements:

**Statement on Use of Electronic Devices:** Students are requested to switch off cell phones while in lecture. Students are not permitted access to cell phones during the mid-term and final exams. There will be no need for the use of calculators during either the mid-term or final exam. Electronic dictionaries, PDAs, smart phones, etc., are not permitted during the mid-term or final exams. Students may use laptop computers to take notes during lecture, but only if this laptop usage is **not** a distraction to other students in the class -- use of a laptop by a student for purposes other than those directly related to the course (e.g., watching YouTube; exchanging messages over MSN; etc.) would be grounds for disallowing further use of the laptop in class by the student.

**Statement on Use of Personal Response Systems ("Clickers"):** "Clickers" will not be used in this course.

### Course Outline (tentative):

- Week 1: Course introduction – An Introduction to Primate Studies.  
(Sept. 13) **Readings:** Strier, *PBE* ch. 1, "Introduction to Primate Studies" (pp. 1-29);  
Strier *PE* -- Moore (ch. 2), & Fedigan (ch. 17); plus, Phillips-Conroy (2000) -- "So, you want to be a primatologist?".
- Week 2: Primate Morphology, Diversity, and Taxonomy.  
(Sept. 20) **Readings:** Strier, *PBE* ch. 2, "Traits, Trends, and Taxonomy" (pp. 30-58);  
Strier *PE* -- Nash (ch. 3), & Ferrari (ch. 13).
- Week 3: Primate Evolution and Diversity.  
(Sept. 27) **Readings:** Strier, *PBE* ch. 3, "Primates Past to Present" (pp. 59-78);  
Strier *PE* -- Stanford (ch. 16), & Pruetz (ch. 21).  
**video:** BBC "Cousins", Part 1 -- "First Primates".
- Week 4: Primate Behavioral Evolution – the theory.  
(Oct. 4) **Readings:** Strier, *PBE* ch. 4, "Evolution and Social Behavior" (pp. 80-112);  
Strier *PE* -- Huffman (ch. 6), & Kappeler (ch. 12).  
**video:** BBC "Cousins", Part 2 -- "The Monkeys".
- Week 5: Evolution of Primate Mating Systems.  
(Oct. 11) **Readings:** Strier, *PBE* ch. 5, "Evolution and Sex" (pp. 113-141);  
Strier *PE* -- Fernandez-Duque (ch. 8), & Henzi and Bartlett (ch. 10).  
**video:** BBC "Cousins", Part 3 -- "The Apes".
- Week 6: Behavioral Implications of Primate Feeding Ecology – the theory.  
(Oct. 18)\* **Readings:** Strier, *PBE* ch. 6, "Food, Foraging, and Females" (pp. 145-166);

Strier *PE* -- Sussman (ch. 4), & Robbins (ch. 15).  
**video:** BBC *Natural World* -- “Clever Monkeys”.  
**\*Assignment #1 due**

Week 7: **\*\*MID-TERM EXAM (20% of final grade); no lecture this day.**  
(Oct. 25)\*\*

Week 8: Ecology and Female Behavioral Strategies – the theory.  
(Nov. 1) **Readings:** Strier, *PBE* ch. 7, “Female Strategies” (pp. 168-193);  
Strier *PE* -- Beehner and Bergman (ch. 9), & Reichard (ch. 11).  
**video:** *Fragile Nature* -- “Moor macaques of Sulawesi”.

Week 9: Ecology and Male Behavioral Strategies – the theory.  
(Nov. 8)\* **Readings:** Strier, *PBE* ch. 8, “Male Strategies” (pp. 196-218);  
Strier *PE* -- Strier (ch. 1), & Di Fiore (ch. 18).  
**video:** *The Nature of Things* -- “Monkey Business”.  
**\*Assignment #2 due**

Week 10: Primate Growth and Development .  
(Nov. 15) **Readings:** Strier, *PBE* ch. 9, “Developmental Stages Through the Life Span” (pp. 219-240);  
Strier *PE* -- Glander (ch. 5), & Cords (ch. 19).  
**video:** *Fragile Nature* -- “Monkeys of Hanuman”.

Week 11: Primate Communicative and Cognitive Behavior.  
(Nov. 22) **Readings:** Strier, *PBE* ch. 10, “Communication and Cognition” (pp. 243-267);  
Strier *PE* -- Snowdon (ch. 7).  
**video:** *National Geographic* -- “The New Chimpanzees”.

Week 12: Primate Community Ecology – The behavior of living in nature.  
(Nov. 29)\* **Readings:** Strier, *PBE* ch. 11, “Community Ecology” (pp. 269-285);  
Strier *PE* -- Fuentes (ch. 14).  
**video:** *Nature* -- “Orangutans - The Original High Society”.  
**\*Assignment #3 due**

Week 13: Primate Conservation – Pressure, Policies, and Prospects.  
(Dec. 6) **Readings:** Strier, *PBE* ch. 12, “Conservation” (pp. 287-303);  
Strier *PE* -- Chapman (ch. 20).  
**video:** *Nature* -- “Spirits of the Forest”.

**\*FINAL EXAM PERIOD (Sat., Dec. 10<sup>th</sup> – Wed., Dec. 21<sup>st</sup>, 2016);** the final exam will only include material covered since the mid-term exam. **Date, time, and location of the final exam to be announced once these have been determined by the Office of the Registrar.**

### **Outline for Short Written Assignments #1, #2, and #3:**

(Assignment #1 due Oct. 18<sup>th</sup>; Assignment #2 due Nov. 8<sup>th</sup>; Assignment #3 due Nov. 29<sup>th</sup> -- each is worth **15%** of the final course grade) –

The primary aim and purpose of the first two short written assignments is to provide you with opportunities to explore the broader primatological literature beyond what is covered in either of the course texts or that I refer to in lecture. Given the relatively short page count of these two assignments (i.e., 3-5 pages, or between approximately 750 and 1,200 words), these assignments will also hone your critical assessment writing skills – because of the page limitation, it will be important to write in a clear, concise, and “crisp” style, and avoid excessive wordiness or detail.

For each of the first two assignments, you should select **one peer-reviewed research article** dealing with some aspect of primate behaviour; each article should be from the “recent” primatological literature – that is, choose a journal article that has been published **within the last 5 years (i.e., from 2011 up to the present)**. While material dealing with the behaviour of nonhuman primates is published in a wide variety of academic journals (e.g., *Behaviour*, *Animal Behavior*, *Evolutionary Anthropology*, *Journal of Human Evolution*, *Behavioral Ecology and Sociobiology*, among others), the easiest and most direct way to select a research article would be to consult one of the four main primatological journals to which Western Libraries subscribes (and all of which are available electronically): *American Journal of Primatology*, *International Journal of Primatology*, *Primates*, or *Folia Primatologica* (note: due to the particular conditions of Western’s subscription to *Folia Primatologica*, access to the full text of published articles is delayed by one year from publication). You can use Strier’s *Primate Behavioral Ecology* (2011) and/or *Primate Ethnographies* (2014) as starting points to select a topic area to pursue (e.g., as I suggested in the course syllabus, allomothering behaviour; vigilance and predator avoidance behaviours of nonhuman primates; extractive foraging behaviour and its possible linkage to primate cognitive abilities; etc.). Alternatively, you can use the “Search Within This Journal” function when you link to the primatology journal websites through the Western Libraries Catalogue.

The content of the first two written assignments should: i) provide a **summary** of the main aim(s) and results of the study reported in the article you have selected; ii) provide a **commentary** on the importance of the study’s main findings (to our understanding of the primate species that is the focus of the report, or to our broader comparative understanding of primate behaviour); and, iii) make some comment on \*what\* might be a productive avenue of future research. This sort of brief summary and commentary style of report is typified by the regular features “News and Views”, which appears in the journal *Nature*, and “Perspectives”, which appears in the journal *Science*. An excellent example of how to effectively combine summary and commentary elements in a single piece of writing is a “News and Views” contribution by primatologist Robin Dunbar (2001), entitled “What’s in a baboon’s behind?” (*Nature* **410**: 158; 8 March, 2001) -- a copy of this commentary has been posted to the course OWL site. If you look up this piece, you will see that Dunbar follows a very particular structure in composing this short summary and commentary (which is just seven paragraphs long), which reflects on a report concerning the evolutionary function of sexual swellings in female baboons (Domb and Pagel, 2001, “Sexual swellings advertise female quality in wild baboons”; *Nature* **410**: 204-206). In the first two paragraphs of his “News and Views” piece, Dunbar provides a **broad descriptive background** to the topic of sexual swellings (which are exhibited in only a minority of primate species). In paragraph three, he succinctly itemizes the five main **explanations** that have been proposed to explain the evolution of sexual swellings. That is, Dunbar gives a comparative outline of the competing **interpretations** that have been put forward to account for the occurrence of sexual swellings (you should find something similar in the introductory portion of the paper on which you are commenting – the author(s) should have stated \*what\* makes their study new and/or important by comparing it to previous work). Dunbar then follows this up in paragraph four with a statement that summarizes the **shortcomings of those interpretations**. This sets the stage in paragraphs five and six for Dunbar to briefly **summarize the key methods and findings** of the study by Domb and Pagel. Finally, in the last paragraph of the piece (i.e., paragraph seven), Dunbar transitions into **critique** mode and suggests what may be a **possible shortcoming in the results** of Domb and Pagel’s study, and the

**interpretation of those results.** From this, Dunbar then suggests how **future research** could address this possible shortcoming. You will notice too that Dunbar's "What's in a baboon's behind?" commentary includes a short list of reference sources (just eight publications, including the article by Domb and Pagel on which he commenting). Similarly, you can make use of a handful of sources in addition to the research report you select for the assignment (e.g., to provide the broad, comparative background for your selected report; to provide alternative interpretations/explanations for the behaviour you are dealing with; or, to indicate how the species on which you are focusing is similar to, or different from, other primate species). **But**, be sure not to get carried away with extensive citations of reference sources and turn this short assignment into a research paper!

**Final details** – be sure your assignment includes a **title page** with the title and author(s) of the research report you are reviewing, as well as the course name, your own name and student number, and the date of submission. Lastly, append a copy to your report of the **first page** of the research report you are reviewing (it can be the last page of your assignment) – this will provide Fernando and I with the name of the journal in which the report was published, as well as the year of publication, and the abstract/introduction of the paper (which is useful for assessing your summary and commentary). If you have any questions regarding either of the first two assignments be sure to ask me or Fernando!

Just a reminder, assignment #3 (due Nov. 29<sup>th</sup>) is to produce an annotated list of what you feel might be the "Top 10 Big Questions in Primatology" (see the pdf on the course OWL site). As Dr. Joanna Setchell notes in that pdf, "This [Top 10 Big Questions in Primatology] idea stemmed from a recent report on the 'Top ten' crucial questions in Social Science, aimed at setting research priorities for the field (*Nature* **470**: 18-19; 2011) and "One Hundred Questions of Importance to the Conservation of Global Biological Diversity" (*Conservation Biology* **23**: 557-567). Our hope is to set the agenda for the future of primatology, and this is your chance to participate." Thus, in assignment #3, you will produce a list of what you consider to be 10 big questions for the future of primatology, **along with brief justification statements to support each question you propose**. Take the time to refer to two sources listed above to get some idea of how broad or how specific your "big questions" should be.

So, to recap... in assignment #3, the goal is to compile a list of what **you** feel/think are the "Top 10 Questions in Primatology" for future research in the discipline. This is a very broad goal, that seeks to establish research questions that ought to be priorities for all of primatology (i.e., a goal that is broader than the focus of Anthro. 2265F); in other words, in addition to questions relating to primate behaviour and primate behavioural ecology, you could include in your list questions that deal with primate evolution and the primate fossil record, primate conservation biology, biomedical research and the use of primates as models of human health and disease, primate (and human) comparative genomics, primate cognition, ethics in primatology, etc. Here are some ideas for starting points on working up a "Top 10" list:

The website of the IUCN/SSC Primate Specialist Group includes a page entitled "In the Field", which highlights some recent primatological fieldwork: [http://www.primate-sg.org/in\\_the\\_field/](http://www.primate-sg.org/in_the_field/)

The website of the International Primatological Society (IPS) includes official Position Statements of the IPS on several issues that could be relevant to a "Top 10 Questions in Primatology" list:

<http://www.internationalprimatologicalsociety.org/policy.cfm>

Primate Info Net (PIN) -- <http://pin.primate.wisc.edu/> -- has on its homepage links (down the left side of the page) to several sites that could be useful, including a page entitled "Info Services" ( <http://pin.primate.wisc.edu/infoserv/> ), which has another link to: [PrimateLit Database](#) -- A bibliographic database to more than 200,000 citations about non-human primate literature dating 1940 to present. Indexing for PrimateLit is provided by [Primate Information Center, University of Washington](#).

From the PIN homepage, there is another link to a page entitled "Research Resources" ( <http://pin.primate.wisc.edu/research/> ) -- which includes links to:

[Compendium of Non-Human Primate Resources for Aging Research](#) -- Compiled by Nancy L. Nadon, National Institute on Aging, Office of Biological Resources and Resource Development.

[Discoveries Through Primate Models](#) -- Most major medical advances in this century have resulted in part from research on animals.

[Genomics Resources](#) -- Resources about primate-related genetics and genomics.

Finally, a paper I have had on the reading list of my "Primate and Human Paleontology" course (Anthro. 3334G) that would be of relevance for this assignment is: [Janson, C. \(2000\). Primate socio-ecology: The end of a golden age. \*Evolutionary Anthropology\* 9\(2\): 73–86](#); this paper includes not only a review of research on primate socioecology in the latter part of the 20th century, it also highlights some particular areas that Janson feels should be focussed on in future primatological research.

Similarly, you could also find suggested directions for future research in Strier's (2011) text.

Recall, too, that the aim of this third assignment is not just to compile a list of 10 top research questions in primatology, but **for each of your questions to also provide a brief annotation** (i.e., just a paragraph or two) in which you provide justification for \*why\* you think the question deserves to be included in your list. I think a useful way of “packaging” your list of research questions and annotations would be to:

- i) Begin with a broad perspective for each of your “Top 10” questions – identify a key area or research theme that you think is a particularly promising or deserving (overlooked?) area of research;
- ii) Incorporate into your justification statement a possible example of the type of research you see developing within that key area or broad research theme; and,
- iii) Where possible, point to a recent piece of research that highlights the sort(s) or research possibilities/contributions/outcomes that you envision each of your “Top 10” questions leading to or expanding upon. (This last element for the annotation may not necessarily be possible; e.g., if you select an area of research that has been relatively ignored until recently – say, nonhuman primates as possible reservoirs for diseases, like Ebola, that impact human populations and/or possible vectors for emerging diseases that could “jump” to humans, like AIDS apparently did – then there may not be a key piece of research that you could “spotlight”). But, if you can find a published source that argues the

same, or a similar, perspective as you make for a certain line of research to be pursued, that would be a very powerful inclusion in your justification annotation. Do not feel, however, that you need to assemble a long list of published studies to justify a given “Top 10” question -- this assignment is \*not\* a research paper!

Good luck on assembling your list of the “*Top 10 Questions in Primatology*”.