**PRIMATOLOGY**

**ANTH 3411.10 (CRN 66843)**

SYLLABUS, FALL 2015

**CLASS TIME & LOCATION:** MW, 12:45-2:00 pm – 2020 K Street, Rm 25

**INSTRUCTOR: Shannon C. McFarlin, Ph.D.**

Office: Science & Engineering Hall, 800 22nd St, Rm 6810

 Phone: 202-994-4245

 Email: mcfarlin@gwu.edu

 **Office Hours**: Wednesday 2:30-4:30pm, and by appointment

**COURSE DESCRIPTION**:

Primates represent diverse species, such as those that form pair bonds (e.g., humans, gibbons, tamarins) to those that live in large promiscuous groups (e.g., baboons, howler monkeys). This course introduces the Order Primates and focuses on understanding why primates behave as they do. We will focus largely on the interface between behavior and ecology. Within a framework that is both comparative and evolutionary, we will explore such topics as primate sociality, foraging, female and male reproductive strategies, life histories, communication, cognition, and interactions between primates and other organisms (plants and animals) within their larger ecological communities. We will consider how basic principles of ecology can help us to understand these and other aspects of primate behavior. Finally, because most primate species are threatened or endangered, we will also consider important survival threats facing primates and strategies for their conservation. Ultimately, this course will give you a solid understanding of what it means to be a primate, and make you better aware of our own place within the Order Primates and the comparative context within which unique aspects of human behavior evolved.

**LEARNING OBJECTIVES:**

At the end of this course, students should be able to:

1. demonstrate knowledge of the defining characteristics, taxonomy, and diversity among living representatives of the Order Primates;
2. be able to apply evolutionary theory to explain variation in aspects of social and reproductive behavior in primates, within an ecological context;
3. demonstrate knowledge and understanding of variation in primate diets and foraging strategies, predation, ecology of female and male social relationships, and theoretical frameworks for explaining variation in primate sociality;
4. demonstrate knowledge and understanding of diversity in primate life history strategies, communication and cognition, interactions between primates and other organisms in the broader-scale ecological communities of which they are a part, and the conservation status of primate populations and strategies to protect them;
5. develop an hypothesis, design an appropriate methodology to test that hypothesis, and implement an observational study of primate behavior;
6. discuss and critically evaluate empirical studies and theoretical arguments in the current scientific literature concerning the interactions between primate ecology and behavior;
7. in both written and oral communication, synthesize and use knowledge gained in this course and from the peer-reviewed scientific literature to address a research problem in primatology.

**REQUIRED TEXTBOOK AND OTHER READINGS:**

There is one required text for this course:

1. Strier, Karen B.  2011*. Primate Behavioral Ecology, 4th Edition.* Prentice Hall.

You must have the 4th edition of this book.

In addition to this textbook, **relevant articles from scientific journals and/or book chapters will be assigned on a weekly basis** to support topics discussed in class (usually amounting to no more than one additional article/book chapter each week). These should also be considered required readings. Citations will be posted to Blackboard during the week prior to the relevant class meeting, and students are responsible for downloading the articles from GW’s library of online journals. I may also occasionally post links to video footage available on the web. Material from both the lecture and readings may appear on exams.

**EVALUATION**:

Your final course grade will be calculated out of a total of 100 possible points, as follows:

 5 points Quiz

 10 points Class Participation

 45 points Two Exams, worth 22.5 points each

 15 points Collaborative Grooming Study

25 points Research Paper (presentation = 5 pts, paper = 20 pts)

1. QUIZ: As we address more advanced topics in this course, knowing the characteristics, Latin nomenclature and basic taxonomy of the Order Primates will be critical for you to get the most out of the readings and discussions in class. Therefore, one quiz will be administered early on in this course, covering material from the Primate Adaptive Trends and Diversity lectures. The format of this quiz may include objective (multiple choice and/or matching), fill-in-the-black, and/or short answer questions.
2. EXAMS: Two exams in this class will be based on material covered during class meetings and in your readings. The format for these exams may include objective (multiple choice and/or matching), short answer and/or essay questions. In short answer and essay questions, you may be asked to apply course concepts to a novel situation; those questions depend on your ability to recall theoretical concepts and apply them in a new context. The second exam will not be explicitly cumulative, although it will rely on foundational knowledge and key concepts developed throughout the first and second halves of the semester.
3. CLASS PARTICIPATION: While the format of this course will include weekly lectures, a substantial portion of this class will be run as a discussion seminar and working in small groups. Such class discussions may occur informally as opportunities arise and focus on theoretical debates in primate behavioral ecology, the adaptive significance of particular behavioral phenomena in primates, or other topics addressed in lecture. Beginning the fourth week of this course, discussions will on occasion follow a ‘Journal Club’ format in which we will read and evaluate an article from the primary scientific literature together as a class, to deepen our understanding of key issues in primate behavior and ecology and practice our critical thinking skills. **Everyone is expected to complete the readings in advance, and come prepared to contribute to class discussion.** Weekly participation in discussions is worth a possible total of **10 points** to be earned by the end of the semester.
4. BEHAVIORAL STUDY AT THE NATIONAL ZOO: Working with one or two partners from class (to be determined based on enrollment), you will conduct a study of primate grooming patterns at the National Zoo. Grooming is well studied in non-human primates and generally considered a good indicator of relationship quality and direction.

This will be a collaborative exercise, designed to introduce you to some of the practical and methodological issues that are involved in carrying out an observational study of primate behavior. In this assignment, you will design a study that analyzes some aspect of non-human primate grooming patterns. You should read the primary literature on non-human primate grooming to develop a hypothesis and design an appropriate methodology for your own study. Standard data collection methods will be introduced during the second week of class. The resultant paper should have:

1. **Introduction** that summarizes the main objective of your research, and reviews at least 5 primate studies in the scientific literature that helped to form the rationale for your hypothesis.
2. **Hypothesis**, formulated based on your reading of the literature, which should state what function you expect grooming behavior to serve in the social milieu of your study species. Following from your hypothesis, you should have clear predictions that you plan to test by collecting behavioral observations at the zoo.
3. **Methods** section that clearly explains how you collected data. You should plan to collect 6-10 hours of field data at the zoo, and you should design your methodology such that these 6-10 hours are most efficient at addressing your hypothesis.
4. **Results** section that summarizes your data. You may use statistical analyses if you wish, but comparing means is sufficient. When you submit your paper, you must also send a copy of your raw data.
5. **Discussion** section that summarizes your findings, and then places them in the context of the primate literature.

Scientific writing is succinct but each sentence is meaningful and directly relevant to your study and interpretation of your results. The paper should be single-spaced, in 12-point font, with 1” margins, and between 4-6 pages in length. Figures and tables are included in your page count, but references are not. One paper is submitted and graded for the group.

1. RESEARCH PAPER & PRESENTATION: Each of you will write a final research paper on a subject of your choice – chosen in consultation with the course director – of relevance to primate behavior and ecology. ***Your paper must have both a topical and a taxonomic focus, and must satisfy one of the following two options:***
	1. Explore in more depth a key question in primate behavioral ecology, and critically evaluate the theoretical arguments and empirical evidence relevant to this issue for a taxon of your choice. In this hypothesis-driven research paper, you must both critically examine some behavioral or ecological phenomenon and a theoretical argument(s) proposed to explain this phenomenon within an evolutionary framework, and cover the literature on some taxonomic subset of primates (e.g., species, genus or subfamily) pertaining to this topic. (For example, “Is infanticide in langurs adaptive”?)
	2. For a taxonomic subset of primates (e.g., species, genus or subfamily) of your choice, more thoroughly examine the environmental context, relevant aspects of behavior and ecology, and survival threats impacting current population(s), and critically evaluate the conservation strategies that have been employed to help ensure their long-term survival.

Email me your topic (including the taxonomic focus) **on or before October 26th**. Students will not be permitted to duplicate topics, and topics will be allocated on a ‘first come, first serve’ basis. (In other words, email me your topic as soon as you have decided, early if possible, but be prepared to switch if that topic has already been claimed.)

A grading rubric (including expectations and requirements) for this assignment will be posted to blackboard in advance. This project will have two components that will be graded:

1. ***Presentation (5 points)***. During the last two meetings of class, each student will give a brief oral presentation (supported by PowerPoint) of the research paper topic.
2. ***Paper (20 points)***. Your paper should be approximately 10-12 pages in length, double-spaced in 12-point font, demonstrate that you have incorporated knowledge gained in the course, and have done a reasonably thorough search (appropriate to the scope of this assignment) of the relevant peer-reviewed scientific literature.

**BLACKBOARD:** Once you are registered for this course, you will automatically have access to the Blackboard site associated with it. Go to [**https://blackboard.gwu.edu/**](https://blackboard.gwu.edu/)and sign in using your email ID and password. We will use Blackboard to communicate announcements, store important documents and external links to web sites of interest that deal with material covered in the course, and provide a way for you to check your grades as the course progresses.

**CLASS POLICIES & OTHER INFORMATION:**

**ATTENDANCE**: Attendance is critical to doing well in this course, as is keeping up with the readings. Classes should not be missed except for reasons beyond your control, such as illness, family emergencies, or participating in university-sanctioned activities. If the absence is unplanned, you should write your instructor on the day of the absence. *More than one missed session without notification* *will result in lowering of your Class Participation grade by 1 point for every missed class.*

**LATE WORK / MISSED EXAMS:** Late assignments and make up exams will only be granted in very limited circumstances, which include an emergency in your immediate family or a medical illness for which you can provide documentation. In such cases, you are required to notify me **prior** to the scheduled exam date / due date, to schedule a make up. Documentation verifying a medical or other emergency will be required.

**RELIGIOUS HOLIDAYS:** It is completely acceptable for you to miss class meeting(s) due to observance of a religious holiday, without penalty. However, it is your responsibility to look ahead on the calendar, and notify me no later than the **first week of the semester (no later than September 4th)** of your intention to be absent from class on the day(s) of religious observance.

**Academic Integrity:** I personally support the GW Code of Academic Integrity, and will addresses violations of this code accordingly. It states: “Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information.” It is your responsibility to read and understand this and other stipulations of GW’s Code of Academic Integrity, and complete all class work in accordance with this code. For the remainder of the code, see: <http://www.gwu.edu/~ntegrity/code.html>

**SUPPORT FOR STUDENTS OUTSIDE OF THE CLASSROOM:**

**Disability Support Services (DSS).** Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information, please refer to http://gwired.gwu.edu/dss/

**University Counseling Center (UCC).**  The Counseling Center (UCC) offers 24/7 assistance and referral to address students’ personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations; and confidential assessment, counseling services (individual and small group), and referrals. You can reach the UCC at 202-994-5300. For additional information, please refer to <http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices>

**SECURITY:** In the case of emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After the evacuation, seek shelter at a predetermined rendezvous location.

**SCHEDULE OF TOPICS AND READINGS**

This schedule is subject to change as we move through the course. All schedule changes will be announced in lecture and posted to blackboard. *I recommend that you check blackboard regularly for the most current course syllabus & schedule.* \*READINGS: The following includes assigned readings from the Strier (2011) textbook only. Additional required readings will be announced on blackboard on a weekly basis.

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| **WEEK** | **DATE** | **TOPIC** | **READINGS\*** |
|   |   |   | Following chapters from Strier (2011); Journal articles posted to BB weekly |
|   |   |   |
| 1 | Aug. 31 | Introduction to the Course | Chapter 1 |
|   | Sept. 2 | History of Primatology; Behavioral Data Collection |
| 2 | Sept. 7 | **LABOR DAY - NO CLASS** | Chapter 2 |
|   | Sept. 9 | Ethograms; Primate Adaptive Trends |
| 3 | Sept. 14 | Primate Adaptive Trends & Diversity | Chapter 3 |
|   | Sept. 16 |
| 4 | Sept. 21 | Evolution & Social Behavior | Chapter 4 |
|   | Sept. 23 |
| 5 | Sept. 28 | **QUIZ**; Evolution & Sex | Chapter 5; **Topics due for grooming study - 5PM, Sept. 28** |
|   | Sept. 30 | (continued) |
| 6 | Oct. 5 | Food & Foraging | Chapter 6 |
|   | Oct. 7 |
| 7 | Oct. 12 | Primate Conservation | Chapter 12 |
|   | Oct. 14 |
| 8 | Oct. 19 | **EXAM 1** | Chapter 7 |
|   | Oct. 21 | Introduction to Socioecology |
| 9 | Oct. 26 | Female Strategies | Chapter 7; **Topics due for final paper by 5PM, Oct. 26** |
|   | Oct. 28 |
| 10 | Nov. 2 | Male Strategies | Chapter 8 |
|   | Nov. 4 |
| 11 | Nov. 9 | Development & Life History | Chapter 9; **Grooming studies due by 5PM, Nov. 9** |
|   | Nov. 11 |
| 12 | Nov. 16 | Communication & Cognition | Chapter 10 |
|   | Nov. 18 |
| 13 | Nov. 23 | Community Ecology | Chapter 11 |
|   | Nov. 25 | **THANKSGIVING - NO CLASS** |
| 14 | Nov. 30 | Community Ecology (cont.) | Chapter 11 |
|   | Dec. 2 | **EXAM 2** |
| 15 | Dec. 7 | Student Presentations | **Submit PowerPoint for presentation by 9AM, Dec. 7** |
|   | Dec. 9 |
| **TBA** | **Final papers due by 5PM on your scheduled final exam date** |