

**BIOL-ANTH 4660, Section 001
EVOLUTION OF HUMAN BEHAVIOR
FALL 2014**

INSTRUCTOR: DR. LISA RAPAPORT
TIME: Tues, Thurs 12:30 – 1:45PM
ROOM: Poole Agricultural Center C127
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(Please use the latter *only* in the event Clemson's server is down)

INHERITANCE
HOMICIDE
MARRIAGE
CUSTOMS



SEXUAL JEALOUSY

Required Reading:

Textbook:

Barrett L, Dunbar RI, Lycett J (2002) Human Evolutionary Psychology. Princeton: Princeton University Press. (available on Internet from ~\$35.00)

Articles:

Article pdf's provided in Blackboard (see also "Schedule" below)

Suggested Reading:

See "Key Readings in Human Behavioral Ecology" file on Blackboard to be posted midway through semester

CHEATING

SHARING



PARENTING
CHILD ABUSE



HUNTING

1. Course Description and Objectives:

Get ready for a course that may forever change the way you view your own behavior and the behavior of those around you. The underlying premise of this course is that human behavior, like physiology and genetics, has been molded by the environmental and social forces in our evolutionary past. Thus, social constructs – such as concepts of fairness, generosity and attractiveness – may have been shaped by natural selection. Furthermore, because evolution is an on-going process, your own behavioral predispositions may represent adaptive responses to modern environments. Although there are many ways to view human behavior, we will explore three complementary approaches:

- human behavioral ecology - examines how survival and reproductive success of individuals may vary according to the behavioral strategies they follow
- evolutionary psychology - examines how our psychological mechanisms may have been shaped by adaptation to past environments

- dual inheritance theory - the idea that human genetics and culture have evolved together and are inextricably intertwined

This course is a Critical Thinking Seminar and as such is designed to help you to develop critical thinking skills as part of the Clemson Thinks² (CT²) program. A primary goal of a critical thinking seminar is for you to gain a deeper understanding of how knowledge is constructed and to hone your ability to carefully evaluate the assumptions and logic underlying that knowledge, rather than just to memorize facts and definitions. As part of the CT² program, we will measure critical thinking skills through the California Critical Thinking Skills Test (CCTST) given at the start and end of the course. Although the CCTST will not influence your grade, it will be used in the overall assessment of Clemson CT² program and to help me to tailor this course to optimize your learning experience. Please complete the test carefully and thoughtfully. You can find more information on the CT² program at <http://www.clemson.edu/assessment/thinks2/>.

2. Learning Outcomes:

- Develop and hone the ability to ask good questions, identify underlying assumptions, recognize reliable and pertinent data, and to reason out answers
- Evaluate scientific hypotheses, especially those regarding the influence of evolutionary history and past and current environments on human behavior and behavioral predispositions
- Integrate ideas from multiple scholarly sources and effectively communicate your understanding of these concepts, both in writing and verbally
- Analyze and interpret historical and contemporary data regarding human behavioral adaptations

3. Course Format:

This course places a strong emphasis on active student participation in discussion. This means that students will play an important role in creating a class that is thought provoking and that supports a free exchange of ideas. It also means that all students are *required* to read the text and assigned articles *before* the first class of the week, and must be *prepared to discuss* them in class. Students will be called on and asked to demonstrate preparation for all discussions. Although showing up, and on time, to class and taking notes is strongly advised, it will not count toward class-participation credit. Informed verbal participation is what comprises the "active class participation" portion of the grade.

I will post questions on article readings at least 3 days before each article is to be discussed. Use these questions to guide your reading, test your comprehension and formulate your own questions. We will use them during class to jumpstart our discussions.

Lectures often will summarize material in the text but are predicated on the assumption that students have read and understood the assigned readings. The material in the textbook will serve as a springboard from which to dive into deeper analysis with other related information, such as that found in the required readings, additional studies, video, current events, etc.

Please understand: consistent class attendance, reading the assignments, and speaking out during discussion are *all* vital to a good grade.

Exams

There will be two written exams. They will cover lectures, video, discussions, handouts and presentations. The second (final) exam will not be cumulative. Make-up exams will only be allowed in cases in which the student has a documented valid excuse *and* contacts me within 24hr of the exam *and* schedules a make-up within 4 days of the exam. Exams will consist of essay questions and also may include fill-in-the-blank, short answer, and graphing.

First Midterm: October 07

Second Midterm: December 08

Essays

Students will be required to write two short (3-4 page) critiques on assigned reading. No late papers will be accepted. Specific essay guidelines and rubrics will be posted on Blackboard well before the papers are due.

The essays are to be written as *informed* opinion pieces and must be written in your own words. Learning to assess the research and ideas of others (not to mention one's own work) with a critical eye is important, not only in science, but in order to be a discerning world citizen. It is a primary goal of the course. These essays will encourage you to integrate information from multiple sources and to use critical reasoning to advocate for your own position.

Bibliography Exercise

Using the Internet to look up information, each student will explore two topics in human behavioral ecology. I will select one, the student the other. You may choose the same topic for this assignment as the one you choose for your presentation, as this will give you a head start on your literature search. However, you may choose a different subject if you wish. The primary goal of this assignment is to gain experience in searching out and selecting relevant scientific literature. Please note: another important goal of this exercise is to familiarize students with journal formatting requirements; therefore, points will be deducted for not following instructions and for using incorrect formatting. I will post detailed instructions on Blackboard for this assignment. Topic and article selections are due October 28th, completed assignment is due November 11th.

Lecture Notes

Many students come to this class with little experience in the taking of notes. Taking good notes will be vital to your success in the class, particularly since only a few lectures will be accompanied by Powerpoint slides. In order to encourage effective note-taking, I will post outlines of each lecture on Blackboard before class. You may use these to guide your notes of the lecture material. You are not required to use them, however.

Presentation

Each student will be required to give a 15-minute presentation of original material (i.e., not from a paper that has been written for another class and not a regurgitation of information provided in lecture). Students are encouraged to use Powerpoint or Prezi for visual aids. You must submit a proposed subject for your presentation at least 2 weeks before presentation week.

Detailed guidelines will be posted within the first month of class on Blackboard. In general,

though, the presentation must be in one of three formats:

1. Review of a Theoretical Topic

Provide a scholarly review of a topic, either one that was covered in class, or preferably, something new to the class. If you choose a topic that was covered in class, you must include information from articles that were not discussed in class.

2. Report of Empirical Data

Present your own data, or synthesize data from other sources, using the behavioral ecology/evolutionary psychology paradigms.

3. Analysis of Art, a Music Genre or Other Popular Media from an Evolutionary Ecology Perspective

Interpret a literature, art, or music genre such as:

- Movie plotlines
- Plots, character types or interactions in romance novels by a particular writer
- Lyrics of a top male or female country/rock/rap music artist

Your analysis must be put in the context of key issues in human evolutionary ecology/psychology that we will have discussed in class (e.g., parental investment, kin selection, mating strategies, adaptive value of cultural norms, reciprocity, mate choice, etc.).

Written Summary of Presentation

A 2-3 page written summary (in 11 or 12 point font) of one's presentation must be handed out to the class *no later than the time of the presentation*. The summary must contain the following elements:

- Quick overview of theoretical issues relevant to your topic (more extensive for option #1)
- Hypotheses and predictions that you are testing (or, for option #1, that the articles you've read have tested)
- Brief description of database and methods (for options #2 and 3 only)
- Results – just the highlights (for options #2 and 3)
- Discussion – are the hypotheses supported or not and why; strengths and weaknesses of your study or the studies you have reviewed; alternative explanations
- Suggestions for Future Research
- References – a list of the articles you have read and used in the presentation

The summary is basically an expanded abstract with references. We will discuss expectations for the presentation & summary in greater detail in class approximately mid-semester. Students are also encouraged to talk to me about potential topics while working on the bibliography assignment and well before the date of one's presentation. Do not leave work on the presentation until the last moment.

Summary plus any presentation supporting material such as Powerpoint file or outline must be turned in to me via email prior to one's presentation.

CT2 Artifact Assignments*

As part of the Clemson Thinks² program, some assignments from each class will be submitted as artifacts for evaluation of Clemson University's Quality Enhancement Plan (QEP). The Clemson Thinks² Assessment Committee will carry out the evaluation and provide feedback to university administrators and to me about how well this course's assignments encourage critical thinking. Should your work be selected for assessment, it will in no way affect your grade in this class or your progress at Clemson University. Your FERPA rights are not violated in this process because the assessment is not connected to your scholastic record and is carried out by persons with a legitimate educational interest in our program. The assignments to be sampled and submitted as artifacts are marked with asterisks in the "Grading" table below.

4. Classroom Etiquette:

- a. Please be seated *before* class begins and stay for the entire class period.
- b. When class is in session, do *not* use your electronic devices for anything other than taking notes; do not read anything not assigned for the course during class and do not sleep, disrupt the class verbally or physically, or engage in text messaging. Any time that you violate this rule, you will be subject to expulsion from the class for the day.
- c. Silence cell phone ringers and put phones away during class. If you need to be able to answer your phone during class due to an emergency or critical personal issue, please let me know before class begins for the day.
- d. Please wait 15 minutes should I be late for class.
- e. Help create a positive class atmosphere by being attentive and responsive to the instructor during lecture and by being polite and respectful during class discussions.
- f. If class should be cancelled for any reason, all readings/assignments/exams for both missed day(s) and the current day will be due on the day that classes resume.

Grading:

Assessment	Percentage of Total
Critique Essays* (10% each) =	20%
First Midterm =	15%
Second Midterm =	15%
Bibliography Exercise =	10%
Presentation* + Summary* =	20%
Active Class Participation =	20%

Note: I do not plan to offer extra credit. Your grade will be based on your performance in the above-listed six components only, weighted as indicated.

SCHEDULE *

WEEK 1: August 21st

Course Introduction and Overview and Introduction to Critical Thinking

Readings: none

WEEK 2: August 26th & 28th

Evolutionary Approaches to Studying Behavior

Text: Barrett L, Dunbar RI, Lycett J (2002) *Human Evolutionary Psychology*. Princeton: Princeton University Press. **Chapters 1 (p. 1-14 only) & 2 (p. 22-36 only)**

Sutherland J, Spiegelhalter D, Burgman MA (2013) Policy: Twenty tips for interpreting scientific claims. *Nature* 503: 335–337

Take California Critical Thinking Skills Test online

*******Thurs: no class*******

WEEK 3: September 2nd & 4th

Inclusive Fitness & Kin Selection

Text: **Chapter 3**

Zuk M (2013) Misguided nostalgia for our Paleo past. *The Chronicle Review*, Feb 18, 2013. retrieved 18 Feb 2013. http://chronicle.com/article/Misguided-Nostalgia-for-Our/137285/?cid=cr&utm_source=cr&utm_medium=en

Scott-Phillips TC, Dickins TE, West SA (2011) Evolutionary theory and the ultimate-proximate distinction in the human behavioral sciences. *Perspectives on Psychological Science* 6: 38-47 (read p. 38-40 only: up to “the evolution of cooperation” heading)

WEEK 4: September 9^h & 11th

Altruism, Reciprocity and Food Sharing

Text: **Chapter 4**

Fox M et al. (2010) Grandma plays favourites: X-chromosome relatedness and sex-specific childhood mortality. *Proceedings of the Royal Society B* 277: 567-573

Tooley GA, Karakis M, Stokes M, Ozanne-Smith J (2006) Generalising the Cinderella Effect to unintentional childhood fatalities. *Evolution and Human Behavior* 27: 224-230

WEEK 5: September 16th & 18th

Sexual Selection

Text: **Chapter 2 (p. 37-44)**

Smith EA, Bliege Bird R, Bird DW (2003) The benefits of costly signaling: Meriam turtle hunters. *Behavioral Ecology* 14: 116-126

Tomasello et al. (2012) Two key steps in the evolution of human cooperation. *Current Anthropology* 53(6): 673-692.

Puts DA (2010) Beauty and the beast: mechanisms of sexual selection in humans. *Evolution and Human Behavior* 31: 157-175

(Plan to discuss the articles on Thursday)

Thurs: Essay #1 due

WEEK 6: September 23rd & 25th

Mate Choice

Text: **Chapter 5**

Cashdan E (2008) Waist-to-hip ratio across cultures: trade-offs between androgen- and estrogen-

dependent traits. *Current Anthropology* 49: 1099-1107

Alvergne A, Lummaa V. (2009) Does the contraceptive pill alter mate choice in humans? *Trends in Ecology and Evolution* 25: 171-179

WEEK 7: September 30th & October 2nd

Male & Female Mating Strategies

Schacht R, Rauch KL, Borgerhoff Mulder M (2014) Too many men: the violence problem? *Trends in Ecology and Evolution* 29(4): 214-222.

WEEK 8: October 7th & 9th

Male & Female Mating Strategies

Campbell A (2013) The evolutionary psychology of women's aggression. *Philosophical Transactions of the Royal Society B* 368: 20130078

Muller MN, Marlowe FW, Bugumba R, Ellison PT (2009) Testosterone and paternal care in East African foragers and pastoralists. *Proceedings of the Royal Society, B* 276: 347-354.

Tues: Oct 7th: Midterm

WEEK 9: October 14th & 16th

Cooperative Breeding and the Evolution of the Family

Hill K, Hurtado AM (2009) Cooperative breeding in South American hunter-gatherers. *Proceedings of the Royal Society, B* 276: 3863-3870.

Hawkes K (2014) Primate sociality to human cooperation: Why us and not them? *Human Nature* 25: 28-48

WEEK 10: October 21st & 23rd

Evolution of Human Life History Strategies

Text: [Chapter 6](#)

Nettle D (2010) Dying young and living fast: variation in life history across English neighborhoods. *Behavioral Ecology* 21:387-395

WEEK 11: October 28th & 30th

Parent-Offspring Conflict

Text: [Chapter 7](#)

Fujita M, Roth E, Lo Y-J, Hurst C, Vollner J, Kendell A (2012) In poor families, mothers' milk is richer for daughters than sons: a test of Trivers-Willard hypothesis in agropastoral settlements in northern Kenya. *American Journal of Physical Anthropology* 149:52-59

Cameron EZ, Dalerum F (2009) A Trivers-Willard effect in contemporary humans: Male-biased sex ratios among billionaires. *PLoS ONE* 4: e4195.

Tues: Bibliography exercise part 1 is due

WEEK 12: November 4th & 6th

Tues: *** Fall Break *******

Marriage & Inheritance

Text: Chapter 8

Boone JL III (1988) Parental investment, social subordination and population processes among the 15th and 16th century Portuguese nobility. In: *Human Reproductive Behaviour* (Betzig L, Borgerhoff Mulder M, Turke P, eds). Cambridge: Cambridge University Press; 201-219

Thurs: Essay #2 due

WEEK 13: November 11th & 13th

Structure of Social Groups and Language

Text: Chapter 12

Bliege Bird R, Scelza B, Bird, DW, Alden Smith E. (2012) The hierarchy of virtue: mutualism, altruism and signaling in Martu women's cooperative hunting. *Evolution and Human Behavior* 33: 64-78

Bressler ER, Martin RA, Balshine S (2006) Production and appreciation of humor as sexually selected traits. *Evolution and Human Behavior* 27: 121-130

Tues: **Completed Bibliography exercise is due**

WEEK 14: November 18th & 20th

Cultural Evolution

Text: Chapter 13

Laland KN, Brown GR (2006) Niche construction, human behavior, and the adaptive-lag hypothesis. *Evolutionary Anthropology* 15: 95-104

WEEK 15: November 25th & 27th

Cultural Evolution

Sexual Selection of a Cultural Trait: Foot Binding in China

Thurs: *** Thanksgiving Break *******

WEEK 16: December 2nd & 4th

Presentations

Readings: none

December 8, 2014

3:00-5:30PM: 2nd Midterm

** The schedule of topics is approximate. However, as long as you complete the readings by the dates on the schedule you will come to class prepared. Midterm exam, critique and presentation dates are fixed. Students have the option of giving a presentation to the class or individually to the instructor. I reserve the right to modify the article reading assignments during the semester.

University Academic Integrity Policy

"As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a 'high seminary of learning'. Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and

respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form."

Academic dishonesty is defined as:

- Giving, receiving, or using unauthorized aid on any academic work;
- Plagiarism, which includes the intentional or unintentional copying of language, structure, or ideas of another and attributing the work to one's own efforts;
- Copying, editing, or deleting computer files that belong to another person or attempting to do so, or use of Computer Center account numbers that belong to another person without the permission of the file owner, account owner, or file number owner.

Clemson's **Office of Academic Integrity** provides extensive resources regarding academic integrity and can help you to comply with standards for avoiding plagiarism, giving credit where credit is due, etc.: <http://www.clemson.edu/academics/academic-integrity/integrityplagiarism.html>

I use **TurnItIn** to check your written assignments for originality. Clemson's TurnItIn feature can help you analyze the level of similarity of your document with other sources:

http://www.clemson.edu/ccit/learning_tech/computer_training/ott/turnitin/index.html

Using work that you already have completed or are currently working on for another course or purpose is self-plagiarism. Assignments handed in to this course are to be done for this course only.

Students with Disabilities

Students with disabilities who need accommodations should make an appointment with me to discuss specific needs within the first month of classes. Students should present a Faculty Accommodation Letter from Student Disability Services when we meet. Student Disability Services is located in G-20 Redfern (telephone number: 656-6848; e-mail: sds-l@clemson.edu). Please be aware that accommodations are not retroactive and new Faculty Accommodation Letters must be presented each semester.

Title IX Policy

Clemson University is committed to creating and maintaining an environment that is free from sexual harassment. Clemson University's Title IX (Sexual Harassment) Policy is located at: http://www.clemson.edu/campus-life/campus_services/access/documents/policies/harassment.pdf Jerry Knighton serves as Clemson's Title IX coordinator.