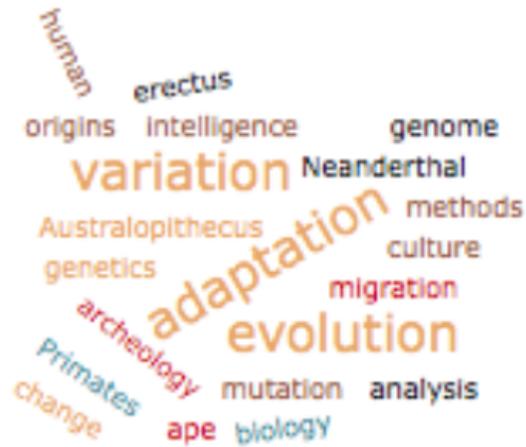


BIOLOGICAL ANTHROPOLOGY
ANTH/BIOL 3510, Section 001, CT²
Fall 2017

INSTRUCTOR: DR. LISA RAPAPORT
TIME: 2:00 – 3:15PM Tues/Thurs
ROOM: **131 Brackett Hall**

Office: 145 Long Hall
Office Hours: T/Th 12:30-1:30 and by
appointment
Office Telephone: 864-656-0838
e-mail: lrapapo@clemson.edu

TA: to be announced
email:



Required Textbook:

Boyd, R. & J. Silk. 2014. How Humans Evolved, 7th ed. NY, NY: W.W. Norton & Co.
- available as paperback or loose-leaf (Clemson bookstore or Internet)
- or e-book (<http://books.wwnorton.com/books/detail.aspx?ID=4294986931>)

Required Supplemental Readings:

PDF's of additional articles posted on CANVAS with accompanying questions for discussion
All required articles are to be read by class time on the day indicated on the syllabus.

Course Description and Objectives:

1. Course Overview

This course will explore the origins of humanity – from the first primate-like mammals to extinct hominins to modern humans. We will review basic evolutionary theory and genetics, investigate the fossil record, survey the living nonhuman primates, and apply this knowledge to gain an understanding of contemporary human diversity.

We will engage in writing and lab exercises that are designed help you to analyze, interpret, and explain scientific data and hypotheses and to build confidence in your ability to do so.

Biological Anthropology is 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

- Apply evolutionary theory to evaluate variation and changes in nonhuman primate and human populations, at the genetic, population and species levels
- Develop and hone the ability to ask good questions, identify underlying assumptions, recognize reliable and pertinent data, and to reason out answers
- Interpret quantitative relationships in graphs, tables and word problems
- Integrate ideas from multiple sources and effectively communicate your understanding of these concepts
- Evaluate scientific hypotheses, such as those regarding the interplay between evolutionary history and ecology, and strategize ways in which to test such hypotheses
- Describe key transitions in the nonhuman primate and hominin fossil record
- Differentiate the major fossil hominin species from morphological characteristics
- Analyze and interpret historical and contemporary data regarding human adaptations

3. Class Structure

- We'll have a combination of lectures, films, class discussions and in-class activities.
- Lectures: Lectures usually will be accompanied by PowerPoint slides and some radio and video clips. I won't just repeat the material in the textbook but will present additional ideas, perspectives, theories, historical contexts, and empirical findings gathered from other texts, journal articles, conference presentations, my own research, my discussions with colleagues and current events.
- In-class activities and in-class writings on assigned readings: These in-class activities and writings will not be scheduled for any particular day of the week. They are designed to help you integrate and assess the information you are learning through the readings and lecture. Typically, each week we will engage in either an in-class activity or a writing exercise.

4. Student Cautions

- a. This is a fast-paced, information-intensive course. Be prepared to attend class, take good notes, engage in discussion and actively participate in lab activities. Read all required material and study consistently. Keeping up with the class in this way will help to ensure your success. If you are having difficulty with effective note taking, please see me.
- b. This is a junior-level class at a nationally ranked university. Expect the course to be intellectually challenging.
- c. Students who wish to drop the course must follow appropriate university procedures to do so. Please do not simply stop attending; this does not drop you from the course.
- d. This is a course in evolutionary biology; therefore, you may find the material to be personally challenging if you have a strong literal belief in the creation stories of the Old Testament, the Koran, the Hindu Upanishads, the Native American cultures, or other traditions. The fossil evidence for human evolution, our behavioral similarities to other

primates, human adaptation to local environments, and other theories and facts can be hard to reconcile with Creationism or the 'Intelligent Design' movement. If you have Creationist beliefs, you'll have to make your own decision about whether this course is right for you. You are very welcome to attend, but you'll need to master, critically evaluate and discuss the course material as it's presented.

- e. Feel free to consult the textbook or other scientific sources at any time for verification on any of the material presented in class. One source of information about the scientific basis for evolution can be found at <http://www.ncseweb.org>. Consult me for other background material, including some excellent video links, on evolution, genetics, etc.
- f. I am happy to discuss in a mutually respectful way any of your concerns about these issues, and I will seek workable solutions that try to reconcile your right to religious and political freedom of belief with my right to academic freedom in teaching, and the university's need to maintain intellectual standards in teaching and grading.

5. Grades and Assignments

My obligation to you is to evaluate your work as objectively as possible. Therefore, your grade depends not on the time and effort you devote to the class but on the outcomes of that time and effort, according to the following components:

| Assignment | Points (as percentages of total) |
|---------------------------------------|----------------------------------|
| In-class writing exercises (5) | 25% (each worth 5%) |
| In-class lab activities (best 8 of 9) | 32% (each worth 4%) |
| Online Quizzes (best 10 of 11) | 20% (each worth 2%) |
| Midterm | 10% |
| Final Exam | 13% |
| Total | 100% |

- a. Following university procedures, your grades are available to you at any time upon request. Feel free to ask.
- b. You are free to disagree with any grade earned in this class. However, before I will discuss any grade with you, you must explain in detail and in writing the *specific* nature of your disagreement.
- c. In-class writing: These will be unscheduled and will consist of short essay questions based on the articles that have been assigned for the week. Questions may also require you to integrate material you've learned in lecture and the text with the readings. The goal of these writing assignments is not only to test your comprehension of the material that you have read but to build your critical thinking skills and your ability to communicate complex ideas in writing. **No makeups for unexcused in-class writings.**
- d. In-class activities: these are designed to help you integrate the information from lecture and text with lab and worksheet activities; the activities will not be pre-scheduled, so it's a good idea to show up for most classes. **No makeups for most in-class activities and no make-ups**

at all for unexcused absences—if you are absent for class you will receive 0 points. On the other hand, missing one is not a big deal because I will only count the best 8 out of the 9 given.

These activities ideally should be conducted in teams of two, although you may work alone if that is your preference; you may have a maximum of 2 partners. Know that it's up to you to make sure that you understand the material in these activities.

The activities will be explained on information sheets. If you and your partner(s) are unclear on the instructions or unsure of your answers, please do not hesitate to ask me or your classmates. I'm here to help but you will get more out of these activities if you try to work through them on your own first!

- e. Quizzes: You will be expected to complete 11 online, multiple-choice quizzes on the material in the textbook outside of class. I will use your 10 highest scores to calculate the quiz portion of your grade. The quizzes are offered through the textbook publisher; your scores automatically will be sent to the CANVAS Gradebook as soon as you click "submit." The quizzes will follow the weekly schedule (see below). Each quiz must be completed before the first class of the week for which it is assigned. For instance, you may complete the quiz on chapter 4 until class time on September 19th at 2:00PM. Any quiz that has not been completed on time will not be accepted. No exceptions.
Instructions: Go to COURSE MATERIALS in CANVAS and select the appropriate chapter. Scroll down to the bottom and click the link: CHAPTER QUIZ. Quizzes are open book and notes but are timed and are to be done individually. Do not share your quiz answers with other students. The goal of the quizzes is to encourage you to come to class having read the textbook and understood the material in the chapters.
- f. Exams: The midterm will be a timed, online test, posted on CANVAS. The final exam will be in-class. Questions for the exams will be taken from class materials: lectures, required readings, films, class discussion and labs. Exam format may include multiple choice, identifications, explanations of graphs, and short essay. The final will be comprehensive in terms of concepts, but with a heavy concentration on material from the last half of the course.
- g. Your grade depends on attending class and actively participating in class activities. Arrive to class having read and thought about the readings. Take part in discussions. If you miss a lecture, get notes from a classmate. Please do not ask me for notes.
- h. Exemptions to the no-make-up policy on in-class activities and writings are very limited. They will be granted only with verifiable proof of a valid excuse, such as conflict with a university-sponsored event. If there is a conflict with another university activity, you must notify me at least a week *before* your absence. If you are sick or have a family emergency on the day of the class, you must provide written 3rd-party documentation (such as a physician's note). You must contact me and schedule a make-up within 5 days of the missed assignment. Please note: some in-class activities cannot be made up, even with an excused absence.
- i. Critical Thinking Rubric for writing assignments:

| | Excellent | Good | Adequate | Vague |
|---|--|---|--|--|
| Explanation of issues | Issue is stated clearly and described comprehensively, delivering relevant information | Issue is stated, described, and clarified but missing some relevant information. | Issue is stated but description without adequate clarification or description. | Issue is stated without clarification or description or issue is misinterpreted. |
| Evidence | Information is identified and with enough interpretation & evaluation to develop a comprehensive analysis. Evidence is clearly differentiated from hypotheses/conclusions. | Information is correctly identified and with enough interpretation & evaluation to develop a coherent analysis. | Information is taken from source(s) with some interpretation & evaluation, but not enough to develop a coherent analysis or synthesis. | Information is incorrect or is not clearly distinguished from hypotheses or conclusions |
| Influence of context and assumptions | Thoroughly identifies assumptions and carefully evaluates the relevance of contexts. | Identifies assumptions. | Questions some assumptions but incorrectly or without clarity. | Lacks an awareness of assumptions. |
| Student's position (perspective or hypothesis) | Specific position is thorough, taking into account the complexities of an issue. | Specific position takes into account the complexities of an issue. | Specific position acknowledges different sides of an issue. | Position is stated but without explanation or development of ideas. |
| Conclusions and related outcomes (implications & consequences) | Conclusions & related implications are logical and reflect student's informed evaluation & ability to place evidence & perspectives discussed in priority order. | Conclusion is logically tied to a range of information; related implications are identified clearly. | Conclusion is tied to information (because it is chosen to fit the desired conclusion); some related implications are identified. | Conclusion is inconsistently tied to the information discussed; related implications are oversimplified. |

j. I do not plan to offer extra credit.

6. 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 or 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 that day.

- c. Please turn off cell phone ringers and put phones away during class.
- d. Please wait 15 minutes should I be late for class.
- e. Help create a positive class atmosphere by being polite and respectful and by being attentive and responsive to the instructor.
- 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.

7. Successful Strategies for Doing Well in this Course

Because I care about your success, I've developed some tips for doing well in this course.

- Get a three-ring binder and keep everything related to the course in it, including this syllabus, PowerPoint printouts, chapter outlines, take-home essay instructions, your graded lab exercises and essays, and your own notes on the readings, lectures, and in-class discussions.
- Read the assignments on time, when you're awake and attentive. Read them by the beginning of the week when they'll be discussed. Take notes on the readings rather than passively highlighting. Think about and digest them. Be ready to ask some reasonable questions about the readings in class.
- Take good notes. Educational experts agree that university-level note-taking requires you to be alert, focused and intellectually engaged with what is being presented in class. *Do not multi-task*. Raise your hand to ask a question if something is unclear. Let me know if I need to slow down. Talk to me after class or during office hours if you would like clarification on something I've said.
- Attend class consistently. I will not monitor or grade attendance. However, more than half of your grade will consist of in-class activities, some of which are unscheduled and none of which will be rescheduled to make-up for absences.

If you treat this course as a soft option, the odds are very good that you will not do well. I am not at all afraid to give a C, D, or F to someone who deserves one. Nor can I be talked out of giving the appropriate grade by a last-minute appearance in my office.

If you find that you are coming to class and doing the work, but are not understanding the material or getting the scores that you wish, please see me or the TA to discuss how you can do better. We will be glad to help.

LECTURE DATES AND TOPICS

| Week and Date | Topics | Readings |
|----------------------|--|---|
| Wk 1: Aug 24 | Introduction and overview | |
| Wk 2: Aug 29 & 31 | The History of Evolutionary Theory Evolution by Natural Selection | Text: Ch 1 (no quiz) Article: Hawks 2014 On-line videos |
| Wk 3: Sept 05 & 07 | Review of Genetics | Text: Ch 2 |

| | | |
|---------------------------|--|--|
| | Recent Advances in Genomics | Article: Check Hayden 2016 Article: Winblad & Lanner 2017 Blog: Fox 2015 |
| Wk 4: Sept 12 & 14 | Population Genetics Evidence for directional selection, genetic drift & constraints on selections | Text: Ch 3 Article: Gross 2017 |
| Wk 5: Sept 19 & 21 | Speciation and Phylogenies | Text: Ch 4 Article: Curry 2013 |
| Wk 6: Sept 26 & 28 | Primate Characteristics Fossil Nonhuman Primates | Text: Ch 9 (no quiz) |
| Wk 7: Oct 03 & 05 | Living Primate Diversity & Taxonomy | Text: Ch 5 Article: Gursky-Doyen 2010 |
| Wk 8: Oct 10 & 12 | Primate Mating Systems Sexual Selection | Text: Ch 6 Article: Fine & Elgar 2017 Blog: Kamath 2017 |
| Wk 9: Oct 17 & 19 | ***Tues: Fall Break*** Diversity of Infant Care Patterns Measuring Behavior | Online Midterm (by Oct 19) |
| Wk 10: Oct 24 & 26 | Life Histories and the Evolution of Intelligence | Text: Ch 8 Article: van Schaik et al. 2016 |
| Wk 11: Oct 31 & Nov 02 | Early Hominins & bipedalism Co-evolution of unique traits | Text: Ch 10 Blog: Baras 2016 |
| Wk 12: Nov 07 & 09 | Early evolution of our genus, <i>Homo</i> | Text: Ch 11 Online video: Lieberman 2016 Article: Wong 2016 |
| Wk 13: Nov 14 & 16 | Later evolution of our genus, <i>Homo</i> | Book Chapters: Shipman 2015 Article: Wong 2009 |
| Wk 14: Nov 21 | Origin & spread of <i>H. sapiens</i> | Text: Ch 12 Article: Wood 2017 |
| Wk 15: Nov 28 & 30 | Later dispersal & adaptations of modern humans | Text: Ch 13 Article: Sapolsky 2006 |

Thurs: Thanksgiving Break

Online video: Wrangham 2014

Wk 16: Dec 05 & 07 Human genetic variation cont.
and Concepts of race

Text: Ch 14
Article: Miller 2012
Article: Check Hayden 2013

Thursday, December 14th **Final Exam: 8:00-10:30AM in 131 Brackett**

DETAILED COURSE SCHEDULE:

Evolutionary Theory: We will review basic genetics, explore modern evolutionary theory from various perspectives, and will analyze the mechanisms of trait inheritance and selection in modern humans.

Week 1: Course Introduction

- What is critical thinking? Why is it important – for this course and for everyday life?
- What is biological anthropology and how does the discipline help us to understand ourselves?

Assignments/Activities:

- Take the California Critical Thinking Skills Test online

Week 2: The History of Evolutionary Theory

IMPORTANT NOTE: Class will not meet on Tuesday this week because I will be attending primate conference. Please take the time to view the three videos (links below) before Thursday.

- What were some of the predominant ideas regarding biological diversity and change prior to Darwin's theory?
- What is Darwin's theory of natural selection and how does his theory of evolution differ from previous ideas?
- What evidence did Darwin find to support his theory of natural selection?
- How do scientists study evolutionary adaptations in pre-human fossils and in modern populations?

Assignments/Activities:

- Read chapter 1: no quiz this week
- Watch: <http://www.hhmi.org/biointeractive/origin-species-making-theory> (~30min)
- Watch: <http://www.hhmi.org/biointeractive/origin-species-beak-finch> (~15min)
- Watch: <http://www.hhmi.org/biointeractive/human-evolution-and-nature-science> (start at part 5. Where do we come from? (5:25min-29min))
- Read Hawkes 2014. Still evolving (after all these years)
- Complete posted questions to discuss on Tuesday of week 3

Week 3: Testing Evolutionary Theory & Review of Basic Genetics

- What is the basic structure and function of DNA?
- What is a gene? What is the relationship between genotype and phenotype?
- How does an understanding of genetics inform us as to the mechanisms of evolutionary change?

Assignments/Activities:

- Read chapter 2 and complete **online quiz**
- Read Check Hayden 2016: Tomorrow's children
- Read Winblad & Lanner 2017: At the heart of gene edits in human embryos
- Read Fox 2015: Genetic link between creativity and schizophrenia may exist
- Complete in-class worksheets on genetics, which includes unraveling the genotypes of parents and children based on hypothetical scenarios.

These materials and reading assignments are provided to allow you to explore how new scientific advances may interface in complex ways with societal values. The readings will encourage you to consider the promise, potential dangers and ethical issues surrounding the CRISPR Cas9 technology.

Week 4: Population Genetics

- What are the forces of selection and how does each one function within and between populations?
- How do population geneticists determine whether natural selection is acting on a given human trait?
- What evidence is there that disease has shaped/is shaping human evolution?

Assignments/Activities:

- Read chapter 3 and complete **online quiz**
- Read Gross 2017_Evol of human diet
- Complete in-class worksheet on population biology, which includes working through Hardy-Weinberg problems

The exercise will demonstrate how a simple mathematical formula helps to clarify the roles of natural selection and drift in human trait variation in a population. Readings and lectures will examine evidence that natural selection has been acting on human evolution in the recent past.

Week 5: Speciation and Phylogenies

- What is a species? How do the various species concepts differ?
- How do species form?
- How does molecular genetics help to inform us about the process of speciation?

Assignments/Activities:

- Read chapter 4 and complete **online quiz (Thursday)**
- Read Curry 2013: The milk revolution
- Watch: <http://www.hhmi.org/biointeractive/making-fittest-got-lactase-co-evolution-genes-and-culture>
- Watch: <http://www.hhmi.org/biointeractive/creating-phylogenetic-trees-dna-sequences>
- Construct phylogenetic trees in class

This section will encourage you to evaluate the pros and cons of partitioning the continuous, dynamic process of speciation into manageable and scientifically analyzable (but artificial) categories.

Nonhuman Primate Evolution: Students will examine nonhuman primate adaptations and

diversity. Students will explore the trajectory of primate evolution.

Week 6: The Evolution of Primate Characteristics

- What characteristics do primates share?
- What environmental changes propelled primate evolution?
- How do we uncover the sequence of evolutionary change in the primate lineage?
- What evidence is there to support hypotheses of evolutionary change in primates?

Assignments/Activities:

- Read chapter 9: NO QUIZ
- Complete a worksheet on molecular evolution in primates

Week 7: Diversity of the Living Primates

- What does it mean to be “transitional” in the evolutionary sense of the word?
- Who are the modern Strepsirhines and Haplorhines?
- By what characteristics do scientists distinguish monkeys from apes?

Assignments/Activities:

- Read chapter 5 and complete online quiz
- Read Gursky-Doyen 2010
- Conduct in-class exploration of primate limb morphology and its link to behavior

The in-class activities are designed to compare primate physical traits and to explore how behavior and physiology are inter-related. The reading asks you to consider our assumptions regarding social complexity of the more “primitive” primates and how a species’ ecology influences its social system.

Week 8: Primate Mating Systems & Sexual Selection

- What kinds of societies do primates have?
- Why do primate females always care for their young, while male contributions are more varied?
- Can generalities from nonhuman primate social and mating strategies be applied to humans?

Assignments/Activities:

- Read chapter 6 and complete online quiz
- Read Kamath 2017: Our assumptions influence the “facts” about sexual behavior: The curious case of Jerry Coyne, Holly Dunsworth, and anolis lizards (<https://evolution-institute.org/article/our-assumptions-influence-the-facts-about-sexual-behavior/?source=tvol>)
- Read: Fine & Elgar 2017: Promiscuous men, chaste women, and other gender myths
- Conduct in-class exploration of Strepsirhine and Haplorhine characteristics

The readings consider how our cultural background may influence the questions we ask and the evidence we see. The in-class activity allows you to compare skull casts of several different primates – lemurs, lorises, monkeys and apes – to conduct a first-hand examination of the differences between clades.

Week 9: Mating Systems and Parental Behavior

- Why do we see so much diversity in primate parental behavior, especially with regard to paternal behavior?
- Under what conditions might natural selection favor infanticide and child abandonment?

Assignments/Activities:

- Conduct observations on primate behavior
- Take the Midterm online by 2:00PM, Thursday, October 19th

The in-class activities are designed to practice and evaluate several different methodologies of primate behavior studies.

Week 10: Primate Life Histories and the Evolution of Intelligence

- Why do primates live such long lives and have such large brains?
- What were the selection pressures that favored the evolution of intelligence in primates?
- What do nonhuman primates actually *know* and how can we determine what they really do and don't know?

Assignments/Activities:

- Read chapter 8 and complete **online quiz**
- Read van Schaik et al. 2016: The reluctant innovator: orangutans and the phylogeny of creativity

Human Evolution: Students will analyze different theories regarding the origins of key hominin traits, including bipedalism, slow life history, intelligence, and language.

Week 11: Early Hominins and the Co-evolution of unique hominin traits

- What are the major hominin species from 6-3 million years ago?
- What were the environmental changes that occurred during early hominin evolution?
- What do these fossils tell us about the behavior of these hominins?
- How can we determine whether a fossil primate was bipedal?
- How might these environmental changes have led to the coevolution of bipedalism, large brain size, tool use and language?

Assignments/Activities:

- Read chapter 10 and complete **online quiz**
- Read Baras 2016: We don't know which species should be classed as humans
<http://www.bbc.com/earth/story/20160111-what-is-it-that-makes-you-a-human-and-not-something-else>

This article and the evidence provided in lecture are designed to allow you to evaluate the strengths and weaknesses of hypotheses based on fossil evidence.

Week 12: Early evolution of our genus, Homo

- What characteristics distinguish *Homo* from earlier hominins?
- Who were *Homo erectus* and *Homo ergaster*? Were they different species?

Assignments/Activities:

- Read chapter 11 and complete **online quiz**
- Read Wong 2016: Mystery human

- Watch: Lieberman 2016: Adaptive shifts accompanying the origin of Homo. CARTA symposium: Origins of Genus Homo
<https://carta.anthropogeny.org/events/sessions/adaptive-shifts-accompanying-origin-homo>
- Watch: https://www.youtube.com/watch?v=lkoV3l4C_Bo
- Conduct an examination of hominin fossil evidence

In-class activities will allow students to directly examine the evidence of hominin evolution, and create and interpret graphs by combining data retrieved from studies of hominin fossils.

Week 13: Later evolution of our genus and early migrations

- Who were the Neanderthals and what do we know about their lives?
- What is the evidence for cognitive and cultural differences and similarities between Neanderthals and anatomically modern humans?
- What are the hypotheses regarding Neanderthal extinction and how does the evidence stack up to support or negate them?

Assignments/Activities:

- Read Shipman 2015: chapters 14 & 15
- Read Wong 2009: Twilight of the Neanderthals

Week 14: Appearance of Early Modern Humans

- When and where did anatomically modern humans appear?
- Was there a cognitive “great leap forward” with the arrival of anatomically modern humans? What types of new behaviors are evident in early modern humans and are they qualitatively or truly quantitatively different?

Assignments/Activities:

- Read chapter 12 and complete **online quiz**
- Read: Wood 2017: Origin(s) of modern humans

Week 15: Migrations and Culture of early Modern Humans

- How did early modern human migrations influence the behavior and physiology of our ancestors?
- Is aggression phylogenetically determined? How flexible are nonhuman primates in their expression of violence and aggression? How does human violence compare to that of the other primates?

Assignments/Activities:

- Read Chapter 13 and complete **online quiz**
- Read/watch:
Wrangham 2014: The parallel evolution of humanity and savagery (symposium talk)
<http://carta.anthropogeny.org/events/sessions/evolution-predatory-and-impulsive-violence-0>
Sapolsky 2006: A natural history of peace.

These assignments ask you to consider how assumptions about aggression may influence the way we think about our nonhuman primate relatives and about how our evolutionary legacy as primates may affect our behavioral tendencies.

Week 16: Human genetic variation and concepts of race

- To what degree do our genes influence our physiology and behavior?
- How has human migration influenced our biology, within and between populations?
- Is race a biologically meaningful category? Why or why not?

Assignments/Activities:

- Read Chapter 14 and complete **online quiz**
- Read Miller 2012: A thing or two about twins
- Read Check Hayden 2013: Ethics – taboo genetics
- Complete activities regarding modern human variation

In-class activities will focus on calculating and interpreting measures of modern human variation. Students will create and interpret graphs from data retrieved from other studies and collected in class. We will use the readings from last week and this week to examine the interplay between genetics, experience and culture in shaping personality and health.

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 exclusive to this class.

Students with Disabilities

Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions who experience a barrier to full access to this class should let the professor know, and make an

