

# Spring 2011

## ANT 3514C – Introduction to Biological Anthropology

### Department of Anthropology, University of Florida

**Time:** Tuesdays 1:55 – 2:45 pm (Period 7)  
Thursdays 1:55 – 3:50 pm (Periods 7 & 8)

**Place:** L007 Turlington Hall (Lectures)  
B304 Turlington Hall Basement (Labs)

**Website:** <http://lss.at.ufl.edu> \* click on (1) e-Learning in Sakai, (2) Log In:  
ANT3514 - Introduction to Biological Anthropology (Krigbaum) – Spring 2011 - All Sections

**Instructor:** Dr. John Krigbaum, Associate Professor  
office: 1350A Turlington Hall  
office hours: Thurs. 10:00 – 11:00 am, or by appointment  
e-mail: [krigbaum@ufl.edu](mailto:krigbaum@ufl.edu) (\* best contact method \*)  
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**Teaching Assistants:** Maranda Kles (e-mail: [mma "at" ufl.edu](mailto:mmakles@ufl.edu))  
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### Objectives, Expectations, & Grading

Anthropology is a holistic discipline. As such, anthropologists attempt to view humans, their activities, and their cultural and biological history in as broad a context as possible. Whereas, sociology explores Western aspects of human society, anthropologists are interested in all peoples, past and present. Such a vast field is divided into a number of subfields, of which biological anthropology (= physical anthropology) will be introduced to you in this course. Its goal is to understand the biological nature and history of humankind and their living (= extant) relatives.

Biological anthropology is firmly rooted in evolutionary theory. The evolutionary biology of humans is thus the central focus of the course. We will cover many topics pertaining to the group of mammals that humans belong, the Order Primates. Basic concepts of genetics, geology, paleontology, comparative anatomy, primate biology, and material culture provide the foundation for understanding humanity's place in nature.

Fundamentals in biology and geology will be related to understanding the context and circumstances that have allowed our bodies and behaviors to change, or evolve, over time. The inheritance of genetic variation will be discussed as it relates to evolutionary change at both micro and macro levels. Aspects of human biological variation, both genetic and "physical," will be discussed with respect to modern human polymorphisms and the evolutionary forces affecting adaptation and variability will be discussed. "Primates" will be introduced as we learn about the fields of primatology, comparative anatomy, and conservation biology. We will learn about the newest techniques in molecular biology used to address a whole range of issues in evolutionary biology, wildlife conservation, and forensic anthropology.

Stepping far back in time, as paleoanthropologists, we will learn about some of the more significant fossil primate finds with particular emphasis on the common ancestor of humans and the African great apes. At about 2.5 million years ago, our genus *Homo* first appears in the fossil record. At about this same time the first evidence of material culture in the form of stone tools appears in the record. We will review the archeological and biological evidence of our hominin ancestry and focus on the biocultural revolution that took place from that time in prehistory to the present. Biomedical aspects of health and disease will be reviewed as will the overall state of the human condition.

ANT 3514C is a four credit course which satisfies the biological science and laboratory requirements for General Education, and satisfies partially the general distribution requirement for Liberal Arts and Sciences. This course is required of all Anthropology majors who must receive a grade of C or better for major credit.

## Grading

- In-class Exams (N=3) 60 % (300 points)(3 exams, plus extra credit)
- On-Line Quiz (N=6) 5 % (25 points)( lowest score dropped)
- Clicker Quiz (N=10) 5 % (25 points)(10 'pop' quizzes, no exceptions)
- Labs (N=13) 30 % (150 points)(attendance, homework, 2 practical exams)

### **STRICT percentile breakdown:**

93.50-100 = A; 90-93.49 = A-; 86.5-89.49 = B+;  
83.5-86.49 = B; 80-83.49 = B-; 76.5-79.99 = C+;  
73.5-76.49 = C; 70-73.49 = C-; 66.5-69.99 = D+;  
63.5-66.49 = D; 60-63.49 = D-; <59.99 = E.

All material covered in this course, be it lecture, reading, lab, etc. is fair game for exams.

TAKE GOOD NOTES !!

Grades will be determined out of 500 points. There is no organized review session prior to exams, but TAs may provide review if requested. A lecture outline of key terms and concepts will be provided on e-Learning in Sakai after class. The keyword list at the end of each chapter in your textbook is a great place to begin. Exams will include objective questions (matching, multiple choice, true/false), and some problems to solve. Exams will not be comprehensive. Make-up exams will not be scheduled unless demonstrated illness, serious emergency, or major scheduling conflict. An official letter, following infirmity procedures, is expected prior to the exam date so that a make-up exam can be arranged. Quizzes are scheduled to keep you "on top" of the material prior to exams. There will be one "extra credit" opportunity in addition to lab assignments that the TA's will assign and grade. Awarded extra credit points (maximum of 20) will be added to the in-class point tally (300 points).

## REQUIREMENTS

**\*\* TURN OFF CELL PHONES IN CLASS \*\***

THAT MEANS NO TEXT MESSAGING, VIBRATING RINGERS, GAMES, ETC.  
STUDENTS TEXT MESSAGING DURING EXAMS/QUIZZES WILL RECEIVE A "0"

NO PHOTOGRAPHY/RECORDING OF ANY KIND DURING LECTURE

- **Textbook:** Stanford, C., Allen, J.S., and Antón, S.C. (2008) *Biological Anthropology*, 2<sup>nd</sup> edition. Upper Saddle River, NJ: Pearson Education, Inc.

**Textbook WEBSITE:** [http://wps.prenhall.com/hss\\_stanford\\_bioanthro\\_1](http://wps.prenhall.com/hss_stanford_bioanthro_1)

- **TurningPoint Clicker.** Students can purchase TurningPoint clickers (also known as remotes or transmitters) at local textbook stores. The last reported retail price for the clickers was \$33.50. Students can also purchase clickers for \$25.00 + shipping from directly from TurningPoint. Go to <http://store.turningtechnologies.com> and enter the code "4ufl" (without the quotes). Shipping cost varies between approximately \$5 and \$35 depending on the shipping method selected.

**\*There will be three random checks in lab to verify UFID and Clicker Device Number \***

## Lecture / Lab Schedule

- Attendance will not be taken in lecture but students are expected to attend and are responsible for *all* material covered in class. Clickers must be brought to each class to determine attendance patterns of students. 10 'pop' clicker quizzes will be conducted.
- Outline Notes for each week will be available on e-Learning in Sakai. Powerpoints of each lecture will not be available. Neither the instructor nor the teaching assistants will distribute lecture notes outside each lecture—**FYI: this semester's lecture notes will be different from prior semesters.** If you miss a class due to extenuating circumstances, you may contact me via email to request access to the missed class powerpoint presentation.

Period – Time	Monday	Tuesday	Wednesday	Thursday	Friday
3 – 9:35 - 10:25		<b>LAB</b> 0319		<b>LAB</b> 3929	
4 – 10:40 - 11:30		<b>LAB</b> 0322		<b>LAB</b> 3800	
5 – 11:45 - 12:35		<b>LAB</b> 3790		<b>LAB</b> 0328	
6 – 12:50 - 1:40		<b>LAB</b> 6269			
7 – 1:55 - 2:45		<b>LECTURE</b>	<b>LAB</b> 0327	<b>LECTURE</b>	
8 – 3:00 - 3:50			<b>LAB</b> 0316		

## Accommodation

*Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.*

**\*If you require accommodation, I must receive your letter by January 14, 2011\***

Date	Lecture	Reading	Lab
		<b>Textbook (Ch:pp);</b>	<b>(Required Downloads: Please print out via e-learning in Sakai "LAB DOWNLOADS" Monday by 5:00 pm for each week's lab.)</b>
<b>I. Introduction</b>			<b>No Labs</b>
R 6-Jan	The Subfields	Introduction:1-13	
<b>II. Evolutionary Basics</b>			<b>LAB 1</b>
T 11-Jan	Thinking Science	1:14-22	Natural Selection
R 13-Jan	Darwin and Co.	1:22-35	
<b>III. Genes</b>			<b>LAB 2</b>
T 18-Jan	Biological Basis of Life	2:36-67	Mendelian Genetics
R 20-Jan	A Genetics Primer	3:68-93; <b>QUIZ 1</b>	
<b>IV. Forces of Evolution</b>			<b>LAB 3</b>
T 25-Jan	Selection and Other Key Forces	4:94-119; C:555-556	Evolutionary Forces
R 27-Jan	Modern Evolutionary Theory		
<b>V. Human Variability</b>			<b>LAB 4</b>
T 1-Feb	Human Variation	5:120-131; B:550-554	The Human Skeleton
R 3-Feb	Polymorphisms and Adaptation	5:131-159; <b>QUIZ 2</b>	
M 7-Feb	online EXAM I (7:00-11:00 pm)		

Date	Lecture	Reading	Lab
		<b>Textbook (Ch:pp);</b>	<b>(Required Downloads:</b> Please print out via e-learning in Sakai "LAB DOWNLOADS" Monday by 5:00 pm for each week's lab.)
<b>VI. The Primate Order</b>			<b>LAB 5</b>
T	8-Feb	Introduction to the Primates	Comparative Primate Anatomy
R	10-Feb	Comparative Primate Anatomy	
<b>VII. More Primates</b>			<b>LAB 6</b>
T	15-Feb	Primate Behavior	Primate Behavior
R	17-Feb	A Brief (1.5 hour) History of Life	
<b>VIII. Fossils and Primate Origins</b>			<b>LAB 7</b>
T	22-Feb	Paleontology and Geological Context	<b>Practical Exam I</b>
R	24-Feb	Early Primate Evolution	
<b>IX. Ape-Hominin Transition</b>			<b>LAB 8</b>
T	1-Mar	Later Primate Evolution	Primate Evolution
R	3-Mar	Mio-Pliocene Hominins	
R			
<b>SPRING BREAK</b>			<b>No Labs</b>
T	8-Mar	No Class	
R	10-Mar	No Class	
M	14-Mar	online EXAM II (7:00-11:00 pm)	

Date	Lecture	Reading	Lab
		<b>Textbook (Ch:pp);</b>	<b>(Required Downloads: Please print out via e-learning in Sakai "LAB DOWNLOADS" Monday by 5:00 pm for each week's lab.)</b>
<b>X. Genus <i>Homo</i></b>			<b>LAB 9</b>
T 15-Mar	Australopiths I	11:308-317	Mio-Pliocene Hominins
R 17-Mar	Australopiths II	11:308-339; <b>QUIZ 4</b>	
<b>XI. <i>Homo erectus</i></b>			<b>LAB 10</b>
T 22-Mar	Plio-Pleistocene Hominins I	12:340-356	Plio-Pleistocene Hominins
R 24-Mar	Plio-Pleistocene Hominins II	12:356-371	
<b>XII. Transitional Hominids</b>			<b>LAB 11</b>
T 29-Mar	Video		Transitional Hominins
R 31-Mar	Transitional hominins	13:372-382; <b>QUIZ 5</b>	
<b>XIII. Modern Humans</b>			<b>LAB 12</b>
T 5-Apr	Neanderthals	13:382-407	Modern Humans & Human Variation
R 7-Apr	Modern Human Origins		
<b>XIV. The Human Experience</b>			<b>LAB 13</b>
T 12-Apr	Modern Human Dispersal	14:408-435	<b>PRACTICAL EXAM II</b>
R 14-Apr	Life History, Health and Disease	16:464-491; <b>QUIZ 6</b>	
<b>XV. What Next?</b>			<b>** NO LABS **</b>
T 19-Apr	The Human Condition	17:492-519	
W 20-Apr	online EXAM III (7:00-11:00 pm)		