Human Evolution/Human Origins

(ANT 4586/ANG 6514)

SPRING 2011

Time: Wednesdays 10:40-1:40 am (Periods 4-6)

Place: B304 Turlington Hall

Instructor: John Krigbaum

office: 1350A Turlington Hall

hours: Thursday (10:00 - 11:00 am), or by appointment

e-mail: krigbaum@ufl.edu tel: 352-392-2253 ext. 243

Course Websites: http://lss.at.ufl.edu (E-Learning in Sakai)

Course Overview

This course will review in considerable detail the evidence for the evolution of humankind. Such a subject of study is indeed diverse, but concerns mainly the hominin fossil and archaeological records and their interpretation. Basic principles of geology, systematics, evolutionary theory, functional morphology and genetics will be introduced and used to aid in understanding and interpreting the "hard" evidence of human evolution. We will step back in time, as paleoanthropologists, and learn about some of the fossil evidence for the evolution of Primates, with emphasis on the evolution of the Hominoidea and the origin and diversification of bipedal hominins. 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 culture (stone tools) appears in the archeological record. We will trace these major steps forward to the origins of modern humans (*Homo sapiens*) and then review the evidence for their spread and diversification throughout the Old and New Worlds.

Course content (lectures, labs, assigned reading) will be evaluated through five in-class quizzes (N=6), two in-class exams, a cumulative Final Exam, and a research paper (grad students 20 page, double-spaced; undergrads 10 page, double-spaced).

Grading

• In class exams/practical 200 points (2 - 100 point mid-term exams)

• Final exam 100 points (1 - 100 point cumulative final, April 29th)

In class quizzes 50 pointsLab exercises 50 points

• Research paper 100 points (due in class, April 20th)

Strict percentile breakdown: 93.50-100 = A; 90-93.49 = A-; 86.5-93.49 = 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.

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.

Required:

• Textbook: Klein Richard G. (2009) *The Human Career: Human Biological and Cultural Origins*, 3rd ed. Chicago: The University of Chicago Press.

Recommended:

- Scientific American Special Editions (\$7.95 each, on-line: www.sciamdigital.com): (2003) New Look at Human Evolution. Volume 13, Number 2. (2006) Becoming Human. Volume 16, Number 2.
- Johanson, Donald & Edgar, Blake (2006) *From Lucy to Language*. Revised, updated, and expanded ed. New York: Simon & Schuster.
- Stringer, Chris & Andrews, Peter (2005). *The Complete World of Human Evolution*. London: Thames & Hudson.

Course Reserve (Smathers Library West)

- Fleagle, John (1999) *Primate Adaptation and Evolution*. 2nd ed. San Diego, CA: Academic Press.
- Hartwig, Walter C. (editor) (2002) *The Primate Fossil Record*. Cambridge: Cambridge University Press.
- Jones, Steve, Martin, Robert, and Pilbeam, David (editors) (1992) *The Cambridge Encyclopedia of Human Evolution*. Cambridge: Cambridge University Press.
- Reader, John (1988) Missing Links: The Hunt for Earliest Man. Boston: Little Brown.
- Tattersall, Ian and Schwartz, Jeffrey (2000) *Extinct Humans*. Boulder, CO: Westview Press.

3rd Floor Reference (Smathers Library West)

• Delson et al. (editors) (2000) *The Encyclopedia of Human Evolution and Prehistory*. New York: Garland. GN281.E53 1999 [In-Library Use]



"What a find, Williams! The fossilized footprint of a brachiosaurus!...And a Homo habilis thrown in to boot!"

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WEEK	TOPIC	READING
WEEK I 5-Jan	INTRODUCTION	
WEEK II 12-Jan	METHODS IN PALEOANTHROPOLOGY	Klein Ch. 1 & 2 (pp. 1-64)
WEEK III 19-Jan	PRIMATES & EARLY PRIMATE EVOLUTION Quiz 1/Lab 1	Klein Ch. 3 (pp. 65-112)
WEEK IV 26-Jan	MIOCENE HOMINOIDS	Klein Ch. 3 (pp. 112-130), Ch. 4 (pp. 183-191)
WEEK V 2-Feb	AUSTRALOPITHS / EARLY HOMININS Quiz 2/Lab 2	Klein Ch. 4 (pp. 131-183)
WEEK VI 9-Feb	AUSTRALOPITHS / EARLY HOMO *research paper/website proposal due (200 words)	Klein Ch. 4 (pp. 191-278)
WEEK VI 16-Feb	EXAM 1 and Practical	
WEEK VII 24-Feb	<u>I</u> IN AND OUT OF AFRICA	Klein Ch. 5 (pp. 279-358)
WEEK IX 2-Mar	TRANSITIONAL HOMININS Quiz 3 / Lab 3	Klein Ch. 5 (pp. 358-434)

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WEEK	TOPIC	READING
9-Mar	no class (Spring Break)	
WEEK X 16-Mar	THE NEANDERTHALS	Klein Ch. 6 (pp. 435-525)
WEEK X 23-Mar	L MORE MUDDLE IN THE MIDDLE (PLEISTOCENE) Quiz 4 / Lab 4	Klein Ch. 6 (pp. 525-614)
WEEK XI 30-Mar	L THE HOMININ MOLECULAR RECORD Guest Lecturer: Prof. Connie Mulligan	Klein Ch. 7 (pp. 615-649)
WEEK XI 6-Apr	I <u>I</u> MODERN HOMININS Quiz 5 / Lab 5	Klein Ch. 7 (pp. 650-724), Ch. 8 (pp. 725-751)
WEEK XI'	V EXAM 2 and Practical	
WEEK XV 20-Apr	/_ STUDENT PRESENTATIONS * research papers due	
FINAL EX	AM WEEK	

29-Apr Final Exam (Period 29A: 7:30-9:30 am)