OLD VERSION
FALL 2009
V14:0002 –HUMAN EVOLUTION
Department of Anthropology, New York University
Dr. Susan C. Antón

(4 points) Evolutionary theory is the unifying theme of the natural sciences. This course provides a comprehensive introduction to the field of biological anthropology in which we explore our evolutionary history. The course covers human and population genetics, modern human biology and variation, primate osteology, behavior, ecology, and evolution, human osteoarcheology, and paleoanthropology. Particular emphasis is placed on the human fossil record.

Lecture and Lab: *Lecture*: T/TH – 12:30-1:45 Silver 703
Lab: 1 session per week as registered

LABS BEGIN THE 2nd WEEK OF CLASSES

```
V14.-0002 section 10 LAB Wed   11:00am - 12:15pm
V14.-0002 section 11 LAB Wed   12:30am - 1:45am
V14.-0002 section 12 LAB Wed    2:00pm – 3:15pm
V14.-0002 section 13 LAB Wed    3:30pm – 4:45pm

V14.-0002 section 6  LAB Thurs  9:30am - 10:45am
V14.-0002 section 7  LAB Thurs 11:00am - 12:15pm
V14.-0002 section 8  LAB Thurs  2:00pm –  3:15pm
V14.-0002 section 4  LAB Thurs  3:30pm –  4:45pm
```

Office Hours/Contact Information:
Dr. Antón: Rm 905; 25 Waverly Place; susan.anton@nyu.edu
Tues 2-3, Thurs 1:45-2:45, and *By appointment*.
TAs: *You may go to the office hours of ANY TA, not just those of your lab TA.*
Steven Worthington (steven.worthington@nyu.edu) OH: T 3-5 or *By appt;* room 904.
Luca Pozzi (lp960@nyu.edu) T 10-12, or *By appt*; 4th floor*;*
Alba Morales-Jimenez (amj285@nyu.edu) OH: T 10-12 or *By appt*; 4th floor;
Maryjka Blaszczyk (mbb348@nyu.edu@nyu.edu) OH: T 3-5 or *By appt*; 4th floor*;*

Course Website: Available through Blackboard**.**

Graded Work: Your course grade will be determined by two midterms, one final exam, and 11 written lab reports (12 are due, the lowest score will be dropped).

Exams: All exams are comprehensive and cumulative. The midterm exams will be given *in class* during the course of the semester. Makeup exams for the midterms will be scheduled ***only*** for students with official, University excuses (generally medical) and must be approved through Dr. A. *prior* to the exam.

!!!!!!!!!!!!Exam Format !!!!!!!!!!!

Exams will include objective (multiple choice, matching, true false), fill in the blank, short answers (1 sentence) and ***ESSAY!!*** (5 to 10 sentences) questions.

Laboratory: There are 12 required laboratory sessions that provide practical exposure to the topics covered in lecture. Attendance in lab is mandatory. You should come to lab fully prepared, having completed all of the readings and being familiar with the material to be covered. Each lab has a written assignment associated with it. Assignments are due promptly at the beginning of the following laboratory session, *unless otherwise indicated* in the syllabus. There will be NO make up labs, quizzes or assignment extensions; instead we will drop your lowest lab score. If you miss a lab it is imperative that you contact your TA to find out what you missed.

Possible Points

Midterm	(Tues Oct. 27th)	80	20.5%
Midterm	(Tues Dec. 1st)	80	20.5%
Final exam	(Thur Dec. 17th; noon)	120	31.0%
11 lab reports	([10 pts x 12 labs]-lowest score)	110	28.0%
TOTAL COURSE POINTS		**390**	**100%**

Required Books:

Exploring Biological Anthropology: The Essentials 2nd Edition by Stanford, Allen and Antón, Pearson: Prentice Hall;. OLD VERSION - BOOK WILL BE CHANGING

Laboratory Manual: Available on your blackboard website.

You will need to read it BEFORE each lab meeting. And bring the exercises to each lab.

OLD VERSION
FALL 2009

Wk	Day	Date	Lecture Topic & Reading - ↓ Chapters in Stanford et al. ↓	Lab Topic
1	Tues	Sept 8th	**You're studying what?! - Intro to Anthropology** Chapter 1	
	Thur	Sept 10th	**Darwin's Theory & Precursors** **Darwin's Evidence** Chapter 2	**NO LAB**
2	Tues	Sept 15th	**The missing piece: Genetics** Chapter 3	1. Intro & Skeleton
	Thur	17th	**Darwin's Evidence** Chapter 2 and 5 (to p.99) **Evolution in our time: Darwin's Finches.** **Mendelian inheritance.** Chapter 4	
3	Tues	Sept 22nd	**Mendelian inheritance.** Chapter 4 **Population genetics** Chapter 4, Appendix B (see corrections on Blackboard)	2. Human Genetic Variation

	Thur	24th	**Origin of Species: Forces of Evolution** Chapter 5 **What are Primates and why are humans primates? Why study either?** Chapter 7:136-146 (indicates pages in chapter)	
4	Tues	Sept 29th	**Human variation: Polymorphism** Chapter 6	3. Anthropometry and Osteometry
	Thur	Oct 1st	**Human adaptability/biology** Chapter 6	
5	Tues	Oct 6th	**Classification of living Primates** Chapter 7:147-168 **The Skeleton**, Appendix A **Primate trends & Comparative Anatomy of Primates** Chapter 7:136-168	4. What is Race?
	Thur	8th	**Primate trends & Comparative Anatomy of Primates** Chapter 7:136-168	
6	Tues	Oct 13th	**Classification, taxonomy, Phylogeny reconstruction** Chapter 5	5. Comparative Anatomy of Primates
	Thur	15th	**Primate Ecology and Behavior** Chapter 7:169-175; Chapter 8	
7	Tues	Oct 20th	**Primate Ecology and Behavior** Chapter 8 **Geologic time scale, stratigraphy**, **dating methods** Chapter 9 up to p.215	6. Social Organization of Primates ***Ex. Credit PRIMATE CHART DUE IN LAB!!***
	Thur	22nd	Overview Midterm	
8	Tues	Oct 27th	**Midterm Exam I** (covers content through the lecture on Oct 15th and Lab #5)	7. Primate Behavior
	Thur	29th	**Primates in Action**	
9	Tues	Nov 3rd	**Primate Evolution I** Chapter 9: 215-221 **Primate Evolution II: Monkeys** Chap 9: 221-235	8. Phylogeny Reconstruction
	Thur	5th	**Primate Evolution III: Apes** Chapter 9: 226-end	
10	Tues	Nov 10th	**Ape Human Differences & Bipedality** Ch 10 to p251 ***Australopithecus* I** Chapter 10: 251 to end	9. Primate Evolution & Bipedality
	Thur	12th	***Australopithecus* II** Chapter 10 pages 251 to end	

11	Tues	Nov 17th	**Early *Homo*** Chapter 11 to page 276; Chapter 14: 361-368; **Stone Tools/Culture**	10. Human Ev I: *Australopithecus Paranthropus*
	Thur	Nov 19th	**Dispersal from Africa Early *Homo erectus* in Africa/Asia** **Later *H. erectus* and others in Asia/Europe** Chapter 11: 282 to end	
12	Tues	Nov 24th	**Neandertal Ancestors** Chapter 12 **Overview for Midterm II**	NO LAB
	Thur	26th	**THANKSGIVING BREAK**	
13	Tues	Dec 1st	**Midterm Exam II** (covers content through the lecture on Nov. 19 and lab # 10)	11. Human Ev II: *Early Homo*
	Thur	3rd	**Becoming Human**	
14	Tues	Dec 8th	**Neandertals** Chap12	12. Human Ev III: *Later Homo*
	Thur	10th	**Genetic Evidence for Modern Human Origins and the Fate of Neandertals and *H. erectus*** Chapter 12; Chapter 14: 369-374 Chapter 13:333-335; 346-351	
15	Tues	Dec 15th	**Anatomically modern humans in new territories** Ch 13; **Recent applications – Forensic Anthro.** Ch 15:403-419	NO LAB
	Thur	**DEC 17th**	**FINAL EXAM --12:00-1:50pm – Silver 703**	