

ANTH B200 - BIOLOGICAL ANTHROPOLOGY

Section 1

Course syllabus

Professor: Dr. Chris S. Beekman

Office: CM 223

Office Phone: 481-6675

Office Hours: 12:00-1:30pm W

12:00-1:30pm R

Class Time: 11:00-11:50am MWF

Class Location: CM 152

COURSE OBJECTIVES

Humans have been considered the only species to make tools, think rationally, use language, and develop cultural innovations to help us deal with our environment. Today we recognize that we share many **biological** similarities with the primates. What is it that makes us different? Why did the earliest ancestors of humans diverge from the ancestors of the chimpanzee, the gorilla, and the orangutan? How did a poorly protected ape become the dominant life form of the planet?

To address these questions, this course will introduce the student to the biological study of humanity. The course is divided into three main sections. The first examines the history of ideas about humanity's place in nature, how these were altered forever by Darwin's theory of evolution by natural selection, and how modern genetics has explained its mechanisms. This will lead into a discussion of modern human variation. Using this background, the course will examine our nearest living relatives, the primates, and what models of their behavior can tell us about our mutual ancestors. We will follow this with a discussion of the primate family tree, and the two major divergences that led first to the Australopithecines, and then to the genus Homo and the first developments of culture. The third section of the course focuses on our ancestors' increasing emphasis on cultural innovation over natural selection, the development of human variation, and the coexistence of Neanderthals and modern Homo Sapiens Sapiens. We will end the course with a discussion of the expansion of modern humans into new environments, the biological effects of increasing cultural innovation, and the biological repercussions of sedentism and agriculture.

EVALUATION OF STUDENT PERFORMANCE

There will be three examinations over the course of the semester, including the final. The final exam will be comprehensive, but weighted slightly towards the last part of the course. The exams will each be worth 30% of your grade. There will also be a short paper, worth 10% of your grade - further details will be given as the semester progresses.

Exams are to be taken the day they are scheduled, and students cannot expect to miss exams and be able to make them up later at their leisure. Students with special needs should inform the professor, but it is their responsibility to provide documentation to Services for Students with Disabilities if they wish to take exams through their facilities.

REQUIRED TEXTBOOK

Essentials of Physical Anthropology, by Robert Jurmain, Harry Nelson, Lynn Kilgore, and Wenda Trevathan. 3rd Edition, West Publishing Company, St. Paul.

COURSE ORGANIZATION AND READINGS

Date	Topic	Readings
Jan. 12 (M)	- Introduction to the course	
Jan. 14 (W)	- History of humans' place in nature	2-22
Jan. 16 (F)	- Countdown to Darwin	23-30
Jan. 19 (M)	- NO CLASS. MLK DAY	
Jan. 21 (W)	- Darwin and his time	30-39
& Jan. 23 (F)		
Jan. 26 (M)	- Mendelian Genetics	58-73
Jan. 28 (W)	- The Modern Synthesis	74-93
Jan. 30 (F)	- The Biomolecular Revolution	41-57
Feb. 2 (M)	- Human Variation Today	101-123
Feb. 4 (W)	- Biology meets Paleontology	249-255
Feb. 6 (F)	- What are Primates?	144-153
Feb. 9 (M)	- An Overview of Primate Classification	153-174
Feb. 11 (W)	- Life Strategies and Primate Behavior	175-202
Feb. 13 (F)	- Primate Behavioral Models: Monkeys	
& Feb. 16 (M)		
Feb. 18 (W)	- Primate Behavioral Models: Apes	
& Feb. 20 (F)		
Feb. 23 (M)	- EXAM	
Feb. 25 (W)	- Primate Evolution	203-221
& Feb. 27 (F)		
Mar. 2 (M)	- Differences between Apes and Humans	
Mar. 4 (W)	- The early Australopithecines	222-248
Mar. 6 (F)	- The Australopithecine divergence	256-266
Mar. 9 (M)	- NO CLASS. SPRING BREAK	
Mar. 11 (W)	- NO CLASS. SPRING BREAK	
Mar. 13 (F)	- NO CLASS. SPRING BREAK	
Mar. 16 (M)	- Why did Australopithecines develop?	266-272
& Mar. 18 (W)		
Mar. 20 (F)	- Early Homo	
LAST DAY TO WITHDRAW FROM COURSES		
Mar. 23 (M)	- Homo Habilis the Hunter?	
Mar. 25 (W)	- Homo Erectus the Hunter?	273-295

Mar. 27 (F) - NO CLASS

Mar. 30 (M) - Tools and Home Bases

Apr. 1 (W) - Homo Sapiens Archaic

& Apr. 3 (F)

296-306

Apr. 6 (M) - EXAM

Apr. 8 (W) - Neanderthals

& Apr. 10 (F)

306-315

Apr. 13 (M) - The significance of Neanderthal behavior

315-322

Apr. 15 (W) - Modern Homo Sapiens

323-333

and the Fate of the Neanderthals

& Apr. 17 (F)

Apr. 20 (M) - The Upper Paleolithic

333-346

and the Population of New Worlds

PAPER DUE

& Apr. 22 (W)

Apr. 24 (F) - Animal domestication, sedentism, and the adoption of agriculture;

health and dietary changes

& Apr. 27 (M)

Apr. 29 (W) - Legacy of human evolution

347-364

Mar. 1 (F) - REVIEW

March 6, (W) 10:30am-12:30pm - FINAL EXAM