INTRODUCTION TO PHYSICAL ANTHROPOLOGY
ANTHROPOLOGY 204 – Spring, 2009

Instructor:
    Professor: Adam Van Arsdale
    Office: PNE 348
    Office hours: Tue 3-4, Wed 10-12
    Contact: avanarsd@wellesley.edu, office phone 781-283-2935

Description: This course will examine the evolutionary foundations of human variability. This theme is approached broadly from the perspectives of anatomy, paleontology, genetics, primatology, and ecology. For this purpose, the course will address the principles of human evolution, fossil evidence, behavior, and morphological characteristics of human and non-human primates. Explanation of the interrelationship between biological and sociobehavioral aspects of human evolution, such as the changing social role of sex, are discussed. In addition, human inter-population differences and environmental factors that account for these differences will be evaluated.

Grading:
    First mid-term 25% online, due March 16
    Second mid-term 25% online, due April 21
    Third mid-term 25% online, due May 15
    “Lab” assignments (4) 10%
    Response papers (4) 10%
    Participation 5%

Grading Policy: Late assignments will not be accepted. Exceptions will be made for appropriate circumstances, but only with approval from Professor Van Arsdale. Anyone seeking additional assistance with the course material should contact Professor Van Arsdale to explore the available options. This course covers a lot of material across a wide range of topics – DO NOT BE AFRAID TO ASK QUESTIONS!!!

Texts: Throughout the semester we will be working through the textbook, “How Humans Evolved,” by Robert Boyd and Joan Silk*. This book should be available online and in the Wellesley bookstore. I will also periodically upload supplemental research articles to the First Class site in pdf form.


* - please note, this is a newly released 5th edition
COURSE SCHEDULE (subject to change)

Week 1: Introduction
   Feb 2: Course overview, what is physical anthropology?
   Feb 5: The evidence for evolution

Readings:  B&S, prologue (xxi-xxv)

Response paper #1 (due online via FirstClass, Feb. 9 9am)

Week 2: Natural Selection and Mendelian Genetics
   Feb 9: Natural selection and adaptation
   Feb 12: Mendelian genetics

Readings:  B&S, Chapter 1 (2-23)
           B&S, Chapter 2 (24-36)

Week 3: From genes to populations
   Feb 16: NO CLASS
   Feb 19: Population and Molecular genetics

Readings:  B&S, Chapter 2 (36-52)
           B&S, Chapter 3 (53-60)

“Lab” assignment #1 – Introduction to genetics (due Feb. 23)

Week 4: Species and Speciation
   Feb 23: Modern Synthesis
   Feb 26: Species concepts

Readings:  B&S, Chapter 3 (61-84)
           B&S, Chapter 4 (85-96)

Week 5: Phylogenies
   Mar 2: Of trees and taxonomies
   Mar 5: Introduction to primates

Readings:  B&S, Chapter 4 (96-113)
           B&S, Chapter 5 (116-127)

“Lab” assignment #2 – Species, trees and phylogenies (due Mar. 9)
Week 6: Primate ecology
  Mar 9: What primates do
  Mar 12: Mating strategies

Readings:  
  B&S, Chapter 5 (127-147)  
  B&S, Chapter 6 (148-175)

Mid-term 1, due March 16, 9am (covering weeks 1-5)

Week 7: Kinship and altruism
  Mar 16: Evolution of cooperative behavior
  Mar 19: Chimps and Bonobos – two ways of being almost human?

Readings:  
  B&S, Chapter 7 (176-197)  
  B&S, Chapter 8 (198-217)

Response paper #2 (due online via FirstClass, Mar. 19 9am)

SPRING BREAK March 20-29

Week 8: Kinship and altruism
  Mar 30: The fossil record
  Apr 2: 60 million years of primate evolution in a day

Readings:  
  B&S, Chapter 9 (218-245)

Week 9: Early hominins
  Apr 6: Origins of hominins
  Apr 9: The Australopithecines

Readings:  
  B&S, Chapter 10 (246-281)

“Lab” assignment #3 – The first half of the human fossil record (due Apr. 13)

Week 10: Origin and dispersal of Homo
  Apr 13: Emergence of genus Homo
  Apr 16: Expanding outside Africa

Readings:  
  B&S, Chapter 11 (282-304)  
  B&S, Chapter 12 (305-319)

Mid-term 2, due April 21, 9am (covering weeks 6-10)
Week 11: Modern human origins
Apr 21: (CLASS TUESDAY) Emergence of genus Homo
Apr 23: Expanding outside Africa

Readings:  B&S, Chapter 12 (319-341)
           B&S, Chapter 13 (342-385)

“Lab” assignment #4 – The second half of the human fossil record (due Apr. 27)

Week 12: Human genetic variation
Apr 27: Genotype and Phenotype
Apr 30: Race

Readings:  B&S, Chapter 14 (386-416)

Response paper #3 (due online via FirstClass, Apr. 23 9am)

Week 13: Human behavior
May 4: Language and cognition
May 7: Biocultural evolution

Readings:  B&S, Chapter 15 (417-442)

Week 14: Human behavior
May 11: Sex, kinship and life history

Response paper #4 (due online via FirstClass, May 11 9am)

Readings:  B&S, Chapter 16 (443-472)

Mid-term 3, due May 15, 9am (covering weeks 11-14)