

Anthropological Sciences 133B/233B

Advanced Human Osteology

Researching human skeletal remains

Description

The analysis of human bones can shed light on questions in paleoanthropology, archaeology, paleontology, and forensics. This course introduces students to the methods and practice of conducting research on human skeletal remains. We will begin by reviewing the range of methods used in skeletal analysis, along with practical strategies for conducting such research. Drawing on this foundation, students will develop and carry out independent projects.

Course Information

Mondays, Wednesdays, and Fridays 11:00 am – 11:50 am

Building 500, Room 101 (after first class session)

5 units

Prerequisites: a course in human osteology (e.g., AnthSci 133A)

Instructor

Prof. David DeGusta

E-mail: degusta@stanford.edu

Phone: 724-6373 (e-mail is a much better way to contact me)

Mailbox: Dept. of Anthropological Sciences, Main Quad Building 360, room 361D

Office: Main Quad Building 80, Room 208

Office Hours: Mondays and Wednesdays 12:15pm-1:15pm

Required Texts

White TD. 2000. *Human Osteology, Second Edition*. Academic Press: San Diego. 563 pages. ISBN #0127466126. approximately \$75.

Plus readings to be distributed on CD in class including:

excerpt from Anholt RRH (1994) *Dazzle 'Em With Style: The Art of Oral Scientific Presentation*. WH Freeman: New York.

DeGusta D (1999) Fijian cannibalism: Osteological evidence from Navatu. *American Journal of Physical Anthropology* 110:215–241.

DeGusta D, Everret MA, Milton K (2003) Natural selection on molar size in a wild population of howler monkeys (*Alouatta palliata*). *Proceedings of the Royal Society: Biology Letters* 270:S15-17.

DeGusta D, Gilbert WH, Turner SP (1999) Hypoglossal canal size and hominid speech. *Proceedings of the National Academy of Science, USA* 96:1800-1804.

DeGusta D, Vrba E (2003) A method for inferring paleohabitats from the functional morphology of bovid astragali. *Journal of Archaeological Science* 30:1007-1020.

Kay RF, Cartmill M, Balow M (1998) The hypoglossal canal and the origin of human vocal behavior. *Proceedings of the National Academy of Science, USA* 95:5417-5419.

Knight J (2003) Clear as mud. *Nature* 423:376-378.

Loehle C (1990) A guide to increased creativity in research – inspiration or perspiration? *Bioscience* 40:123-129.

excerpt from Oliver JE (1991) *The Incomplete Guide to the Art of Discovery*. Columbia University Press: New York.

Grading

10% Class Participation

30% Oral Presentation of Project

60% Project Report

Deadlines

- April 19/21 - be ready to discuss project ideas individually with Prof. DeGusta
- May 1/3 - presentation (informal) of your project idea to class
- May 31 to June 5 – presentation (formal) of your project results to class
- June 9 at 5pm – written project report due by e-mail (degusta@stanford.edu)

Schedule & Readings

Students are expected to have completed the reading prior to the listed class session.

4/5 Wed	Course Introduction; Research Project Planning
4/7 Fri	Developing Project Ideas, Literature Review Techniques Loehle (1990), Oliver (1991)
4/10 Mon	Research Project Case Study: Neanderthal Speech Kay et al. (1998), DeGusta et al. (1999)
4/12 Wed	Research Project Case Study: Fijian Cannibalism DeGusta (1999)
4/14 Fri	Research Project Case Study: Howler Monkeys and Natural Selection DeGusta et al. (2003)
4/17 Mon	Research Project Case Study: Bovids and Ancient Environments DeGusta and Vrba (2003)
4/19 Wed	Individual Consultations on Project Ideas; <i>be ready to discuss your ideas</i>
4/21 Fri	Individual Consultations on Project Ideas; <i>be ready to discuss your ideas</i>
4/24 Mon	paleoanthropology conference, no class

4/26 Wed	paleoanthropology conference, no class
4/28 Fri	paleoanthropology conference, no class
5/1 Mon	Project Idea Presentations; <i>be ready to present your project idea</i>
5/3 Wed	Project Idea Presentations; <i>be ready to present your project idea</i>
5/5 Fri	Research Planning Techniques; Data Recording Methods
5/8 Mon	Data-Gathering Methods
5/10 Wed	Individual Research Consultations
5/12 Fri	Individual Research Consultations
5/15 Mon	Data Analysis Methods
5/17 Wed	Individual Research Consultations
5/19 Fri	Individual Research Consultations
5/22 Mon	Research Presentation Methods Anholt (1994), Knight (2003)
5/24 Wed	Individual Research Consultations
5/26 Fri	Individual Research Consultations
5/29 Mon	holiday, no class
5/31 Wed	Research Project Presentations; <i>be ready to present your results</i>
6/2 Fri	Research Project Presentations; <i>be ready to present your results</i>
6/5 Mon	Research Project Presentations; <i>be ready to present your results</i>
6/7 Wed	Research Roundtable

Research Paper due by 5pm via e-mail (degusta@stanford.edu) by 5pm Fri June 9