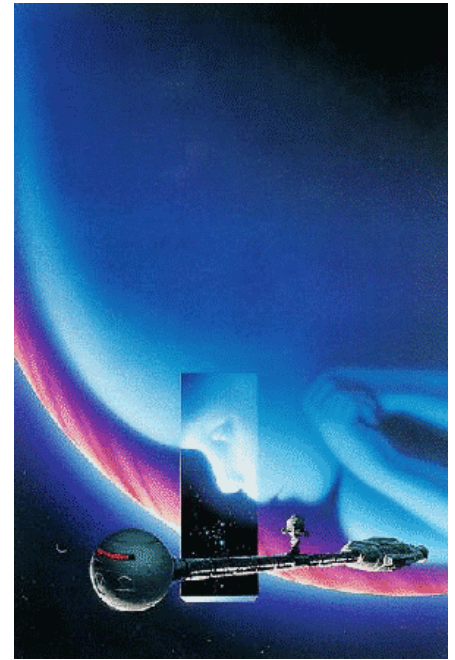


ANTH 5303 – Spring

Special 2001 Edition!!!

Method and Theory in Biological Anthropology: Human Evolutionary Anatomy

INSTRUCTOR: Dr. Peter Ungar
Dept. of Anthropology
Old Main 343
Phone: 575-6361
E-mail: pungar@comp.uark.edu
Office hours: Tuesday & Thursday
10:00 AM – 11:00 AM



CLASS MEETS: Tuesday/Thursday 11:00AM – 12:20AM in Old Main 118

TEXTBOOK:

Human Evolutionary Anatomy by Aiello & Dean, Academic Press, 1999. *Grant's Atlas of Anatomy* by Agur & Lee, Lippincott, Williams & Wilkins, 1991. Supplemental readings will be assigned and available in the Anthropology Reading Room MAIN 332. Bring your atlas with you to each class!

COURSE DESCRIPTION/GOALS:

Paleoanthropologists reconstruct the past lifeways and systematic relationships of our ancestors using comparative studies of bony morphology and associated soft-tissue structures. This course will cover several aspects of human anatomy (and that of our ancestors and nearest living relatives) commonly used to infer function and phylogeny, and will consider methods and theories used to infer such things. ANTH 5303 will be held in the anthropology laboratory where casts will be available for examination, and it will take the form of a discussion/seminar course.

COURSE REQUIREMENTS:

Grades will be based on: (1) class participation (10%), (2) student presentations and associated research papers (50%), and (3) two examinations (40%). Class attendance is obligatory, and 10% of your final grade will be based on participation. Each student is expected to make two oral presentations in class followed by papers (@ 15 pages each on each of the topics covered in those presentations. Papers are due on the presentation day, and will not be accepted late. Finally, this course will have two examinations (20% of your final grade each). This course assumes that you have a working knowledge of physical anthropology on the undergraduate introductory level.

OTHER INFORMATION:

If class is cancelled due to inclement weather, a message will be left at 575-6361. Students are expected to abide by the Graduate School's policy on academic honesty.

CLASS SCHEDULE:

This schedule is subject to modification. Chapter numbers refer to the Aiello and Dean book. Review appropriate sections of the atlas as you go through the readings (before class) to illustrate anatomical features being considered.

Week 1

16 Jan. Introduction to the course: goals and expectations.

18 Jan. Classification and phylogenetic reconstruction, and anatomical terminology
Reading: Chapters 1, 2

Week 2

23 Jan. A brief refresher: the human skeleton
Reading: Review bony anatomy sections in your atlas!

25 Jan. Survey of the hominids I - genera *Ardipithecus* and *Australopithecus*
Supplemental reading

Week 3

30 Jan. Survey of the hominids II - the genus *Paranthropus*
Supplemental reading

1 Feb. Survey of the hominids III - the genus *Homo*
Supplemental reading

Week 4

6 Feb. The bones of the human skull
Reading: Chapter 4

8 Feb. Comparative anatomy of the hominoid mandible and cranium
Reading: Chapter 5

Week 5

13 Feb. The hominoid masticatory system
Reading: Chapter 6

15 Feb. Dental development and microstructure
Reading: Chapter 7

Week 6

20 Feb. Dental morphology, microwear and diet
Reading: Chapter 8, Supplemental reading

22 Feb. The Intracranial region
Reading: Chapter 9, Falk

Week 7

27 Feb. Encephalization and hominid endocasts
Reading: Chapter 10, Supplemental reading

1 Mar. The facial skeleton
Reading: Chapter 11

Week 8

6 Mar. The cervical spine and support of the head
Reading: Chapter 12

8 Mar. The anatomy of the vocal tract

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| | | Reading: Chapter 13, Supplemental Reading |
| Week 9 | | |
| | 13 Mar. | Review session - the neck down! |
| | 15 Mar. | First Examination! |
| Week 10 | | Spring Break!! |
| Week 11 | | |
| | 27 Mar. | Bipedal locomotion and the postcranial skeleton Reading: Chapter 14 |
| | 29 Mar. | No class |
| Week 12 | | |
| | 3 Apr. | The hominoid thorax and vertebral column Reading: Chapter 15 |
| | 5 Apr. | Bones, muscles and movements of the upper limb Reading: Chapter 16 |
| Week 13 | | |
| | 10 Apr. | The hominoid arm Reading: Chapter 17 |
| | 12 Apr. | The hominoid hand Reading: Chapter 18, Supplemental reading |
| Week 14 | | |
| | 17 Apr. | Bones, muscles and movements of the lower limb Reading: Chapter 19 |
| | 19 Apr. | The pelvis Reading: Chapter 20 |
| Week 15 | | |
| | 24 Apr. | The hominoid thigh Reading: Chapter 21 |
| | 26 Apr. | The hominoid knee and lower leg Reading: Chapter 22 |
| Week 16 | | |
| | 1 May | The hominoid foot Reading: Chapter 23 |
| | 3 May | Review session - the neck down! |

Final Examination: Friday, May 11th 7:30 AM – 9:30 AM