

OXFORD COLLEGE
Fall Semester 2010

ANTHROPOLOGY 201

Concepts and Methods in Biological Anthropology

(Class # 4715 ANTH_OX 201 1J)

TuTh 1:00 pm – 2:15 pm
Humanities Hall 201

Professor: Dr. Aaron Stutz
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phone: 770-784-8349
Office Hours: by appointment (PLEASE DON'T BE SHY)

Biological Anthropology – Human Diversity in Evolutionary Perspective

Key concepts:

- **The scientific study of the evolution of life**
- **The evolution of species in the human lineage, *Hominini***
- **The evolution of diversity within the human species, *Homo sapiens***

Key objectives:

- **Learn about the MODERN SYNTHESIS in evolutionary biology**
- **Learn about how primate studies, the fossil record, and DNA studies facilitate the scientific study of speciation in human evolution**
- **Learn about how we study disease, adaptation, migration, and intermixing in our global, unified, yet biologically diverse species, *Homo sapiens***

Textbook (REQUIRED): R. Jurmain, L. Kilgore, W. Trevathan, and R.L. Ciochon (2010). *Introduction to Physical Anthropology* (2009-2010 Edition). Belmont, CA.: Wadsworth/CENGAGE Learning.

- [Available at the Oxford College Bookstore](#)

Additional REQUIRED Readings will be posted on Anthro 201's [Blackboard](#) page.

COURSE GRADES

Your grades are assigned on an objective, absolute scale. If everyone in the course performs at an excellent level, then everyone will receive an A.

The exams and assignments will be weighted as follows:

Three Midterm Exams: 10-20-30% (sliding scale)

Response Papers/Lab Assignments: 24%

IN CLASS LAB - Group Activities: 8%

Attendance/In Class Participation: 8%

The sliding scale for the midterm exam weights means that the exam that you do better on will be weighed at the higher percentage value.

IMPORTANT: Remember that you are bound to follow assignment and exam instructions according to the Honor Code of Oxford College. You may collaborate in studying for exams and in preparing your lab/response paper assignments, but cheating and plagiarizing are simply Honor Code violations. Do not cheat on exams and turn in work that you yourself thought of, wrote, and drew.

JUST AS IMPORTANT: The exams are MANDATORY. A failure to complete any one of these will result in a failing grade for the course.

STILL JUST AS IMPORTANT: Unless you have a valid excuse that you present to me beforehand, *all exam and due dates must be strictly adhered to*. RARE EXCEPTIONS are granted under the following clear conditions: you have a valid, documented medical or family *emergency*. If you require special arrangements through Disability Services, or if you otherwise know ahead of time that you have a major schedule conflict, contact the professor as soon as possible to schedule an alternative exam. Be prepared to provide documentation.

Response Papers/Lab Assignments: You will have 8 response paper and/or lab assignments. You will be asked to define key terms and answer key questions. These are designed as study notes, guides for participation in discussion, and complements to lecture and class discussions/presentations. For each assignment you should expect to fill about *about* 2-3 pages, single-spaced. To receive full credit, you must print out your assignment in hard copy. (Handwritten assignments will be accepted at a 1 point penalty.) Additional drawing assignments will, of course, be handwritten.

Be prepared to spend an hour a week in the Anthro Lab during open lab times when you have lab-based assignments.

I will keep track of participation by collecting your assignments at the end of class on the due date. One full participation point will be deducted from your grade if you are not present in class on the due date or if you e-mail your assignment to me. I will allow up to two exceptions to the participation requirement (to allow for slow printers, illness, or whatever – no excuses required).

Each lab/response paper assignment contributes 3 total points to your grade. *Do not be late with your assignments.*

Further instructions on format and content will be given in class and in handouts on Blackboard.

KEY DATES TO REMEMBER:

Exam I - In class, Tue September 23
Exam II - In class, Thu November 11
Exam III- In class, Tue December 7

ALL EXAMS TAKE PLACE IN HUMANITIES 201

THIS SYLLABUS IS SUBJECT TO CHANGE AT THE PROFESSOR'S DISCRETION
ANY CHANGES WILL BE ANNOUNCED IN CLASS.

Anthropology 201 Syllabus

Week 1 Introduction

Thu August 26 - *Human Diversity in Evolutionary Perspective*

Week 2 Darwin's Impact on How We Investigate Nature

BLACKBOARD Lecture - *Biological Anthropology - The Holistic Science of Us*

Text: Jurmain et al. Ch. 1

Tue August 31 - *What's the big deal with Darwin?*

Text: Jurmain et al. Ch. 2

BLACKBOARD FILM: The Origin of Species

Thu September 2 - In Class Lab - *Human Evolutionary Anatomy*

E-Reserves: 1-Weiner - Beak of the Finch Chs. 1

2-Weiner - Beak of the Finch Ch. 2

Week 3 Descent with Modification. Or, One With the Unity of Life

BLACKBOARD Lecture - *The Origin of Species and the Evolution/Creationism Debate*

E-Reserves: 3-Alonso & Ricardo - Life on Earth

4-Talbot - Darwin in the Dock

5-Brumfiel - Intelligent Design

Tue September 7 - *Is it evolution yet?*

Text: Jurmain et al. Ch. 3(all) & Ch. 4(pp.80-96)

DUE IN CLASS: 1st Response paper/Lab Exercise

Thu September 9 - In Class Lab - *The Inheritance of Complex Traits in Populations*

Week 4 Evolutionary Theory

BLACKBOARD Lecture - *The Modern Synthesis*

Text: Jurmain et al. Ch. 4 (pp. 96-108)

Tue September 14 - *Systematics and Species*

Text: Jurmain et al. Ch. 5

Thu September 16 - In Class Lab - *How do we define species?*

SUPPLEMENT: Speciation Powerpoint

DUE IN CLASS: 2nd Response Paper/Lab Exercise

Week 5 EXAM I

Tue September 21 - **Group Activity - Speciation**

Thu September 23 - *EXAM I - IN CLASS*

Week 6 Primatology - Understanding Our Evolutionary Relatives

BLACKBOARD Lecture - *Meet the Primates*

Text: Jurmain et al. Ch. 6

Tue September 28 - *Primate Social Life*

Text: Jurmain et al. Ch. 7

[E-Reserves](#): 6-Milton - Primate Diets
 7-DeWaal et al - Overcrowding and Social
 Behavior

Thu September 30 - IN CLASS LAB - *Variation in Great Ape Social Adaptation*

[E-Reserves](#): 8-DeWaal - Bonobo Societies
 9-Whiten & Boesch - Chimpanzee Cultures
BLACKBOARD FILM: *The Demonic Ape*

Week 7 Studying Hominin Evolutionary Emergence

BLACKBOARD LECTURE - *Human Evolution as Primate Evolution*

Text: Jurmain et al. Ch. 8

Tue October 5 - *Theory and Method in Paleoanthropology*

Text: Jurmain et al. Ch. 10

[E-Reserves](#): 10-Leonard - Food for Thought

DUE: 3rd Response Paper/Lab Exercise

Thu October 7 - IN CLASS LAB - *Bipedalism and the Origin of Hominins*

Text: Jurmain et al. Ch 11(pp. 302-310)

[E-Reserves](#): 11-Lovejoy - Bipedalism

Week 8 Ardipithecines and Australopithecines

BLACKBOARD Lecture - *Bipedalism, Birth, and Hominin Sociality*

[E-Reserves](#): 12-Rosenberg & Trevathan - Giving Birth

Tue October 12 - NO CLASS - Mid-semester break

Thu October 14 - *Speciation and the Early Hominin Niche*

[E-Reserves](#): 13-Lovejoy - Ardi and Hominin Evolution

14-Coppens - East Side Story

15-Leakey & Walker - Australopiths

Week 9 Origins of the Genus *Homo*

BLACKBOARD Lecture - *Speciation and Niche Specialization*

Text: Jurmain et al. Ch 11(pp. 310-321)

[E-Reserves](#): 16-Ackermann & Smith - Hominin Speciosity

Tue October 19 - *Tool Making, Niche, and the Genus Homo*

Text: Jurmain et al. Ch 11(pp. 321-328)

[E-Reserves](#): 17-Schick & Toth - Ch. 3

Thu October 21 - IN CLASS LAB - *Making Silent Stones Speak*

Text: Jurmain et al. Ch. 12

[E-Reserves](#): 18-Schick & Toth - Ch. 4

DUE: 4th & 5th Response Paper/Lab Exercise (COMBINED - WORTH 6 pts)

Week 10 The Evolution of the Genus Homo

BLACKBOARD Lecture - *Out of Africa, Episode I*

Text: Jurmain et al. Ch. 12

[E-Reserves](#): 19-Wong - Stranger in a New Land
20-Jablonski - The Evolution of Hairlessness

Tue October 26 - *Neandertals and Other Regional Populations*

Text: Jurmain et al. Ch 13

Thu October 28 - IN CLASS LAB - *Investigating Neandertal Origins*

[E-Reserves](#): 21-Wong - Who Were the Neandertals?

DUE: 6th Response Paper/Lab Assignment

Week 11 The Great Debate - Who's Who in the Genus *Homo*?

BLACKBOARD Lecture - *The Origins of Anatomically Modern Humans*

Text: Jurmain et al. Ch. 14

[E-Reserves](#): 22-Bar-Yosef & Vandermeersch - Moderns and Neandertals in the Levant
23-Wong - The Modern Mind

Tue November 2 - *Recent African Origins or Multiregional Evolution?*

[E-Reserves](#): 24-Tattersall - We Were Not Alone
25-Thorne & Wolpoff - Multiregional Evolution

Thu November 4 - IN CLASS LAB - *DNA Analysis and Neandertals*

[E-Reserves](#): 26-Relethford - Neandertal Genes
27-Wong - Twilight of the Neandertals

DUE: 7th Response Paper/Lab Exercise

Week 12 EXAM II

BLACKBOARD Lecture - *The Origins of Anatomically Modern Humans*

[E-Reserves](#): 28-Wong-The Littlest Human
29-Wong-Hobbit Hullabaloo
30-Wong-New Views on the Hobbit

Tue November 9 - IN CLASS DISCUSSION - *Speciosity in the Genus Homo*

Thu November 11 - *EXAM II - In Class*

Week 13 *Homo sapiens* as a Global, Genetically Interconnected Species

BLACKBOARD Lecture - *The Lemba*

Tue November 16 - *The Scientific Myth of Race*

Text: Jurmain et al. Ch. 15

[E-Reserves](#): 31-Relethford - Admixture

Thu November 19 - *Genetics and Genealogical Relatedness*

[E-Reserves](#): 32-Relethford - Palimpsests of the Past

DUE: 8th Response Paper/Lab Exercise

Week 14 THANKSGIVING BREAK

NO CLASSES - THANKSGIVING HOLIDAY

Week 15 Natural Selection and Adaptation in Human Populations

BLACKBOARD Lecture - *Clines!*

Text: Jurmain et al. Ch. 16

Tue November 30 - *Adaptation and Maladaptation*

Text: Jurmain et al. Ch. 17

Thu December 2 - GROUP ACTIVITY - *Race, Gene Flow, and Adaptation*
COURSE EVALUATIONS

Week 16 EXAM III

Tue December 7 - *EXAM III* - In Class

Exam III will be available for pickup in Humanities 201 during the scheduled Final Exam time: Tuesday December 14, 9 am to 12 pm. NOTE THAT THERE IS NO FINAL EXAM. On Tuesday December 14 you can find out how you did on the third exam and receive your final grade for the course.