

OXFORD COLLEGE
Spring Semester 2009

**ANTHROPOLOGY 200
NBB 201**

Foundations of Behavior

Class # 7586
ANTH_OX200 09A
NBB_OX201 09A

**MWF 9:35 am – 10:25 am
Language Hall 201**

Professor: Dr. Aaron Stutz
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Office Hours: BY APPOINTMENT ONLY – times available daily

FOUNDATIONS OF BEHAVIOR

This course introduces you to scientific inquiry into the biological bases of BEHAVIOR in animals, with a focus on humans.

COURSE OBJECTIVES

- Define and understand behavior, considered in ecological context
- Explore how the biological process of evolution shapes behavior
- Examine the relationship between the biological concept of behavior with that of adaptation
- Learn in detail about human behaviors that help us to understand our own evolution and place in nature

REQUIRED TEXTS:

The Human Strategy: An Evolutionary Perspective on Human Anatomy (2005), by John H. Langdon. Oxford University Press.

- Available at the Oxford College Bookstore

On Fertile Ground: A Natural History of Human Reproduction (2001), by Peter T. Ellison. Harvard University Press.

- Available at the Oxford College Bookstore

REQUIRED E-COURSE PACK

Additional REQUIRED Readings will be posted on Anthro 200's Blackboard page.

To access the Blackboard course packs:

- go to <http://classes.emory.edu>
- log in and select *Foundations of Behavior* in your course links
- click on the *Course Documents* button on the upper left
- open or right-click on assigned PDF file for download
- the articles are included as PDF files, numbered to correspond with the coursepack readings listed in the syllabus

ABOUT BLACKBOARD and READINGS

You will be asked to write weekly brief responses to assigned readings, and you will turn in those assignments by posting them to Blackboard prior to class meetings. This way, I will be able to review your submissions before the class when they are due. This will facilitate discussion and participation. You will be expected to keep your response papers—printed out—in a well organized Course Notebook (three-ring binder required), along with lecture notes and handouts.

You will be allowed only *one* unexcused late or missing response paper, without it affecting your Course Notebook grade.

Attendance: Attendance is part of your participation grade. You will be allowed only 3 unexcused absences before your participation grade is affected.

Disabilities Services: Oxford College provides students with disabilities all reasonable accommodation for participating in educational programs, activities, or services. Students with disabilities requiring accommodation for any activities or requirements in Anthro 200 must register and consult with Emory University's Office of Disability Services. Please contact Karen Martucci, Director of Academic Services at Oxford College, for further information and assistance. REMINDER: It is your responsibility to provide official documentation of your right to disabilities related accommodation for class participation. We will work out any accommodations that are specific to the course. But we must do so as early in the semester as possible.

Religious Holidays: Your rather agnostic professor has full respect for religious practice and the personal, family, and community obligations that go with it. Please be prepared to share with me if you are going to miss any scheduled class activity due to observance of a religious holiday. And please let me know as soon as possible in the semester if any scheduled exam or other due date conflicts with a religious holiday that you observe. This way, we can make alternative arrangements early!

COURSE GRADES

The exams and assignments will be weighted as follows:

Course Notebook (Response Papers, Lecture Notes, and other Materials): 20%

In Class Participation: 5%

Midterm Exam I: 15-25% (sliding scale)*

Midterm Exam II: 15-25% (sliding scale)*

Final Exam: 30-40% (sliding scale)*

*** The sliding scale for the exam weights means that if you do better on the final, then it will weigh a more, and *vice versa* for the mid-term.**

Exam and Course Notebook grades are determined on a percentage basis. Participation will be simply graded on a scale of 0 to 5. Final grades will be calculated on a percentage basis according to the weights shown above. They will then be converted to a +- letter scale. Grades are given so that:

94 - 100	= A
<94	= A-
<92	= B+
<89	= B
<82	= B-
<80	= C+
<78	= C
<72	= C-
<70	= D+
<68	= D
<65	= F

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

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.

KEY DATES TO REMEMBER:

Midterm Exam I -	LANG201, in class, Fri February 6
Midterm Exam II -	LANG201, in class, Wed March 27
Turn in Course Notebook -	LANG201, 2 pm, Mon May 4
Final Exam -	LANG201, 2-5 pm, Mon May 4

Reminder: ALL EXAMS TAKE PLACE IN LANG201

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

**Anthropology 200
Spring 2009
Syllabus**

Week 1 Introduction

Wed January 14 - *Behavior and Evolution*

Fri January 16 - *Evolution and Adaptation* PART I -
Text: Langdon - Chapter 1

DUE - Response to Langdon - Chapter 1 (*Must be submitted to the Blackboard Week 1 Group by 8 am*)

Week 2 Evolution and Adaptation

Mon January 19 - *NO CLASS - Rev. Martin Luther King, Jr., Birthday Holiday*

Wed January 21 - *Evolution and Adaptation PART II*
Text: Langdon - Chapter 2
e-Coursepack: 1-Mayr - How to Carry Out an Adaptationist Program
2-Gould & Lewontin - the Spandrels of San Marco
IN CLASS FILM: Evolution: Darwin's Dangerous Idea

Fri January 23 - *Genes, Adaptation, and Behavior*
e-Coursepack: 3-Dawkins - The Selfish Gene, Chapter 3
4-Dawkins - The Selfish Gene, Chapter 4

DUE - Response to Week 2 Readings (*Must be submitted to the Blackboard Week 2 Group by 8 am*)

Week 3 Games of Life

Mon January 26 - *How Life Evolves*
e-Coursepack: 5-Sigmund - Introduction-Mendel's Legacy
6-Sigmund - Self-Replicating Automata and Artificial Life

Wed January 28 - *Evolutionary Dynamics PART I*
e-Coursepack: 7-Sigmund - Population Ecology and Chaos
8-Sigmund - Random Drift and Chain Reactions

Fri January 30 - *Evolutionary Dynamics PART II*
e-Coursepack: 9-Sigmund - Evolution and Sex

DUE - Response to Week 3 Readings (*Must be submitted to the Blackboard Week 3 Group by 8 am*)

Week 4 Midterm Exam I

Mon February 2 - *Evolving Games, Evolving Players*
e-Coursepack: 10-Sigmund - Evolutionary Game Theory

Wed February 4 - Review for Exam I

DUE - Response to Week 4 Readings and Review Questions (*Must be submitted to the Blackboard Week 4 Group by 8 am*)

Fri February 6 - **MIDTERM EXAM I in class**

Week 5 Human Anatomy and Behavior PART I

Mon February 9 - *The Human Niche*
e-Coursepack: 11-Leonard - Food For Thought

Wed February 11 - *Behavior and Biomechanics*
Text: Langdon - Chapter 3

Fri February 13 - *The Biomechanics of the Skull and Teeth*
Text: Langdon - Chapters 4 & 5

DUE - Response to Week 5 Readings (*Must be submitted to the Blackboard Week 5 Group by 8 am*)

Week 6 Human Anatomy and Behavior PART II

Mon February 16 - *The Biomechanics of the Spine*
Text: Langdon - Chapter 6

Wed February 18 - *The Biomechanics of the Upper Limb*
Text: Langdon - Chapter 7

Fri February 20 - *The Biomechanics of Bipedalism*
Text: Langdon - Chapters 8 & 9

DUE - Response to Week 6 Readings (*Must be submitted to the Blackboard Week 6 Group by 8 am*)

Week 7 Discussing Human Homeostatic Systems

Mon February 23 – *What Does Skin Do?*

Text: Langdon – Chapter 13

Wed February 25 – *What Does the Digestive Tract Do?*

Text: Langdon – Chapter 14

Fri February 27 – *What Do the Respiratory and
Circulatory Systems Do?*

Text: Langdon – Chapters 15 & 16

DUE – Response to Week 7 Readings (*Must be submitted to the
Blackboard Week 7 Group by 8 am*)

Week 8 A Terrestrial Niche and a Big-Bodied Bipedal Adaptation

Mon March 2 – *Human Endurance*

Text: Langdon – Chapters 17 & 18

Wed March 4 – *Human Niche and Adaptation PART I*

DUE – Response to Week 8 Readings (*Must be submitted to the
Blackboard Week 8 Group by 8 am*)

Fri March 6 – *Human Niche and Adaptation PART II*

DUE – Response to Review Questions (*Must be submitted to
the Blackboard Week 8 Group by 8 am*)

DUE – MID-TERM NOTEBOOK CHECK – bring your notebook to
class

Week 9 SPRING BREAK

Mon March 9 – Fri March 13 – **NO CLASSES**

Week 10 Big Brains Evolving

Mon March 16 – *Brain Basics*
Text: Langdon – Chapter 10

Wed March 18 – *Brain Evolution*
Text: Langdon – Chapter 11

Fri March 20 – *Using Our Brains: Hearing and Seeing*
Text: Langdon – Chapter 12

DUE – Response to Week 10 Readings (Must be submitted to the Blackboard Week 10 Group by 8 am)

Week 11 Midterm Exam II

Mon March 23 – *Overview and Review*
DUE – Response to Review Questions (Must be submitted to the Blackboard Week 11 Group by 8 am)

Wed March 25 – **Midterm Exam II in class**

Fri March 27 – *Sex and Sexuality in Humans*
Text: Langdon – Chapter 19 & 20

Week 12 The Arc of Life

Mon March 30 – *Human Life Histories as Intertwined Life Histories*
Text: Langdon – Chapter 21
Ellison – Two Births

Wed April 1 – *The Beginning of Life*
Text: Ellison – Surviving the First Cut

Fri April 3 – *The Birth Process*
Text: Ellison – A Time to be Born

DUE – Response to Week 12 Readings (Must be submitted to the Blackboard Week 12 Group by 8 am)

Week 13 The Human Cycle: Offspring Care, Growth, and Maturity

Mon April 6 – *The Big Deal with Lactation*

Text: Ellison – The Elixir of Life

Wed April 8 – *Growing Up*

Text: Ellison – Why Grow Up?

Fri April 10 – *Environment, Work, and Reproduction*

Text: Ellison – Balancing Act

DUE – Response to Week 13 Readings (*Must be submitted to the Blackboard Week 13 Group by 8 am*)

Week 14 The Rise and Decline of Reproductive Success

Mon April 13 – *Female Reproductive Histories*

Text: Ellison – The Arc of Life

Wed April 15 – *Male Reproductive Histories*

Text: Ellison – The Body Builders

Fri April 17 – *Human Life History as Adaptation*

Text: Langdon – Chapter 21 (re-read)

Ellison – The Journey and the Procession

DUE – Response to Week 14 Readings (*Must be submitted to the Blackboard Week 14 Group by 8 am*)

Week 15 The Evolution of Cooperation

Mon April 20 – *The Evolution of Animal Societies*

e-Coursepack: 12-Maynard Smith & Szathmáry – The Origins of Societies

Wed April 22 – *The Prisoner's Dilemma and Reciprocity*

e-Coursepack: 13-Nowak, May & Sigmund – Arithmetics of Mutual Help
14-Sigmund – Chapter 8

Fri April 24 – *The Evolution of Teamwork*

e-Coursepack: 15-Wilson & Wilson – Evolution for “The Good of the Group”

DUE – Response to Week 15 Readings (*Must be submitted to the Blackboard Week 15 Group by 8 am*)

Week 16 REVIEW AND FINAL EXAM

Mon April 27 – *REVIEW AND EVALUATION*

Mon May 4 – Turn in COURSE NOTEBOOK at final exam

Mon May 4 – FINAL EXAM: 2-5 pm, LANG201