# OXFORD COLLEGE Spring Semester 2013

### ANTHROPOLOGY 200Q NBB 201

#### **Foundations of Behavior**

ANTH\_OX200Q 10J (4734) & ANTH\_OX200Q-01J (4745) Crosslisted as NBB201

### TuTh 10:00 am - 11:40 pm & TuTh 1:40 pm - 3:20 pm Language Hall 101

**Professor: Dr. Aaron Stutz** 

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Office Hours: BY APPOINTMENT ONLY - times available MWF

## INQUIRY INTO FOUNDATIONS OF BEHAVIOR

This course introduces you to scientific inquiry into the <u>biological bases</u> of BEHAVIORAL ADAPTATIONS in humans.

#### LEARNING OBJECTIVES

- Define and understand <u>behavior</u>, considered in ecological context
- Explore how the biological processes of <u>evolution</u> shape <u>behavior</u>
- Examine the relationship between the biological concept of <u>behavior</u> with that of <u>adaptation</u>
- Explain in detail about how <u>human behaviors</u> have an evolutionary and ecological context, which helps us to understand our own evolution and place in nature

#### **REQUIRED TEXTS:**

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

Available at the Oxford College Bookstore

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

Available at the Oxford College Bookstore

### **REQUIRED E-COURSE PACK:**

Additional REQUIRED Readings will be posted on Anthro 200Q'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

#### **COURSE GRADES**

The exams and assignments will be weighted as follows:

In Class Attendance and Participation: 5%
Homework and In-Class Assignments: 10%
Midterm Exam I: 10-25% (sliding scale)\*
Midterm Exam II: 10-25% (sliding scale)\*
Midterm Exam III: 10-25% (sliding scale)\*
Midterm Exam IV: 10-25% (sliding scale)\*
Individual Essay on Adaptation: 5%

**Individual Essay on Adaptation: 5%** 

**Individual Essay on the Human Niche: 5%** 

Final Reflective Essay: 5%

\* The sliding scale for the exam weights means that the raw exam scores (out of 100%) will be ranked 1-2-3-4, and they will correspondingly weigh 25%, 20%, 15%, and 10% toward your final grade.

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 <63 = F

IMPORTANT: The exams and the final reflective essay 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.

#### **ACADEMIC HONESTY:**

All Oxford students are bound by the Oxford College Honor Code. The two most relevant Honor Code violations are cheating on exams and assignments and plagiarism. The standard penalty for a first cheating or plagiarism violation is an F in the course. However, other violations, such as giving false information to an instructor, may also lead to penalties that are just as serious. The Oxford College Honor Code outlines the details of possible violations; how suspected violations are reported; the procedures of investigation; your rights and responsibilities if you are accused of a violation by the Honor Council investigators; and the consequences of the full Honor Council finding that you have committed an Honor violation.

Moreover, the Honor Code provides a detailed definition of plagiarism. Please read it.

In fewer words: Read the Honor Code, carry out and support honest work by yourself and your classmates, ask the instructor or Honor Council leaders when you are unsure, and do not cheat or plagiarize.

#### **KEY DATES TO REMEMBER:**

Midterm Exam I 
Midterm Exam II 
Midterm Exam III 
Midterm Exam III 
Midterm Exam IV 
LANG101, in class, Thu February 28

LANG101, in class, Thu March 28

LANG101, in class, Thu April 25

Final Reflective Essay 
SafeAssign by 12 pm, Tue May 7

**Reminder: ALL EXAMS TAKE PLACE IN CLASS IN LANG101** 

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

## Anthropology 200Q Spring 2013 Syllabus

### I. Introduction: The Biological Foundation of Behavior is Evolution

Tue January 15 - Introduction: Evolution and Behavior

Thu January 17 - Is it adaptation yet?

TEXT: Langdon - Chapter 1

e-Coursepack: 01-Mayr - How to Carry Out an Adaptationist

Program

02-Gould & Lewontin - the Spandrels of San

Marco

recommended: TEXT - Langdon - Chapter 2

Tue January 22 - Behavior and Niche

e-Coursepack: 03-Hutchinson - Homage to Santa Rosalia

04-Whittaker et al - Niche, Habitat, Ecotope

Thu January 24 - The Human Niche

e-Coursepack: 05-Sigmund - Population Ecology and Chaos

06-Leonard - Food For Thought

In-class Exercise: Definitions and Descriptions of <u>Behavior</u>, <u>Adaptation</u>, and <u>Niche</u> – Diagram and Short Essay

Tue January 29 - Exam I - Covers Behavior, Adaptation, Natural Selection, Ecosystem, Species, Niche, and the Definition of the Human Niche

# II. What Behaviors Are Adaptive in the Human Niche, and How Has the Human Body Evolved To Support Those Behaviors?

Thu January 31 - Evolution of the Human Niche
TEXT: Langdon - Chapter 3

## In-Class Exercise: Mini-Essay on Co-Evolution of Elements of the Human Niche

Tue February 5 - The Biomechanics of the Skull and

Teeth

TEXT: Langdon - Chapters 4 & 5

### In-Class Exercise: Peer Evaluation of Niche Co-Evolution Essay

Thu February 7 - The Biomechanics of the Upper Limb
TEXT: Langdon - Chapter 7

Tue February 12 - The Biomechanics of Bipedalism TEXT: Langdon - Chapters 6, 8, & 9

Thu February 14 - Homeostasis, PART I: What Does Skin

TEXT: Langdon - Chapter 13

e-Coursepack: 07-Jablonski - Evolution of Hairlessness

# IN CLASS EXERCISE: Definition and Description of Key Human Behavioral Adaptations – short essay and diagram

Tue February 19 - Homeostasis, PART II: What do the

Respiratory and Circulatory Systems

Do?

TEXT: Langdon - Chapters 15 & 16

Thu February 21 - Homeostasis, PART III: Human

Endurance

TEXT: Langdon - Chapter 17 & 18

Tue February 26 - REVIEW: The Human Body in Evolutionary Perspective

DUE on SafeAssign at 9 am: Essay on Adaptation

Thu February 28 - Exam II - Covers the Human Niche, Key Behavioral Adaptations, Biomechanics, Chewing, Bipedalism, and Homeostatic Systems, and Terrestrial Endurance

## III. Why Did We Evolve Big Brains?

Tue March 5 - Brain Basics

TEXT: Langdon - Chapter 10

e-Coursepack: 08-Damasio - Of Appetites and Emotions

Thu March 7 - Sensing with our Brains: Seeing,

Balancing, and Hearing

TEXT: Langdon - Chapter 12 e-Coursepack: 09-Damasio - Feelings

IN CLASS EXERCISE: Making Sense of the Brain

Tue March 12 & Thu March 14 - NO CLASSES - SPRING BREAK

Tue March 19 - Evolving Large Brains

TEXT: Langdon - Chapter 11

e-Coursepack: 10-Dunbar - Brains and Group Life 11-Manhart- Myths in the Brain

Thu March 21 - Brains, Language, and Tools

e-Coursepack: 12-Stout et al - Language and Tool Making

13-Goren-Inbar - Archaeology and Evolution

of Cognition

IN CLASS EXERCISE: The Social and Embodied Brain

Tue March 26 - The Brain in the Human Niche
e-Coursepack: 14-Tomasello - Primate Intentional
Communication
15-Tomasello - Human Cooperative
Communication

# Thu March 28 - Exam III - Covers the Human Niche and Brain Adaptations

# IV. What is Life History Theory? How Does it Help Us to Understand the Human Niche—and Adaptations to It?

Tue April 2 - Human Cooperation, Culture, and Its

Ecological Impact
e-Coursepack: 16-Hill et al. - Cooperation, Culture, and
the Human Impact

Thu April 4 - Life History Theory - An Introduction
e-Coursepack: 17-Ross - Primate Life Histories
18-Kramer & Ellison - Life Histories and
Growth

# In-Class Exercise: Definitions and Diagrams of Life History Theory Key Concepts

Tue April 9 - The Big Deal with Lactation
Text: Ellison - The Elixir of Life

Thu April 11 - Growing Up

Text: Ellison - Why Grow Up?

Tue April 16 - Environment, Work, and Reproduction
Text: Ellison - Balancing Act

# In-Class Exercise: Summary of Key Aspects of Human Female Reproductive Development, Physiology, and Behavior

Thu April 18 - Female and Male Reproductive Histories

Text: Ellison - The Arc of Life
Ellison - The Body Builders

Tue April 23 - Human Life Histories as Intertwined Life Histories

Text: Ellison - The Journey and the Procession

In-Class Exercise: Summary of Key Aspects of Human Female and Male Reproductive and Offspring Investment Strategies

Thu April 25 - Exam IV - Covers the Life History
Theory, Human Reproductive Biology, and Human
Reproduction and Investment in Offspring as
Evolutionary Strategies

VI. Conclusion: Developing an Evolutionary Perspective

Tues April 30 - Turn in Essay on Adaptation on SafeAssign by 9 am

Tues May 7 - Turn in Final Reflective Essay during the 10J Final Exam period ... on SafeAssign ... by 12 noon.