# OXFORD COLLEGE Spring Semester 2011

## ANTHROPOLOGY 200 NBB 201

#### **Foundations of Behavior**

ANTH\_OX200 01J Crosslisted as NBB201

## TuTh 1:00 pm - 2:15 pm Language Hall 201

**Professor: Dr. Aaron Stutz** 

Office: Language Hall 102 (Anthro Lab)

e-mail: astutz@emory.edu phone: 770-784-8349

Office Hours: BY APPOINTMENT ONLY - times available daily

Teaching Assistant: Gabriela Alvarez (gmalvar@emory.edu)

### **FOUNDATIONS OF BEHAVIOR**

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

#### LEARNING OBJECTIVES

- Define and understand behavior, 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

Life Histories of the Dobe !Kung: Food, Fatness, and Well-Being Over the Life-Span (2010), by Nancy Howell. University of California Press.

Available at the Oxford College Bookstore

#### **RECOMMENDED TEXT:**

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 200's Blackboard page.

To access the Blackboard course packs:

- go to <a href="http://classes.emory.edu">http://classes.emory.edu</a>
- · 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 and TA-session Participation: 5%
Homework Assignments and Quizzes: 5%
Group Presentations and Assignments: 5%
Midterm Exam I: 15-35% (sliding scale)\*
Midterm Exam II: 15-35% (sliding scale)\*
Midterm Exam III: 15-35% (sliding scale)\*
Individual Essay on Hunter-Gatherers: 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, and they will correspondingly weigh 35%, 25%, and 15% for 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, the individual essay, 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.

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

Midterm Exam I -LANG201, in class, Tue February 1 Midterm Exam II -LANG201, in class, Thu February 24 Midterm Exam III -LANG201, in class, Tue April 5 LANG201, in class, Tue April 26 **Individual Essay -**Final Reflective Essay -Dr. Stutz's Office, by 4 pm, Tue May 3

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 2011 Syllabus

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

Tue January 18 - Introduction: Evolution and Behavior

Thu January 20 - Is it adaptation yet?

e-Coursepack: 01-Langdon - Chapter 1

02-Mayr - How to Carry Out an Adaptationist

Program

03-Gould & Lewontin - the Spandrels of San

Marco

recommended: Langdon - Chapter 2

- Tue January 25 Behavior and Niche
  e-Coursepack: 04-Hutchinson Homage to Santa Rosalia
  05-Whittaker et al Niche, Habitat, Ecotope
- Thu January 27 The Human Niche
  e-Coursepack: 06-Sigmund Population Ecology and Chaos
  07-Leonard Food For Thought
- Due in class: <u>Individual</u> Definitions and Descriptions of <u>Behavior</u>, <u>Adaptation</u>, and <u>Niche</u> Diagram and Short Essay
- Tue February 1 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 February 3 Elements of the Human Niche Skin,

  Homeostasis, and Adaptation
  e-Coursepack: 08-Jablonski Evolution of Hairlessness
- Tue February 8 Work on First Group Presentations:

  The Terrestrial, Omnivorous,

  Extractive Niche

  Supplementary Readings from Langdon
- Thu February 10 FIRST GROUP PRESENTATIONS:

  Adaptations to the Terrestrial,

  Omnivorous, Extractive Niche

DUE 10 am on BLACKBOARD: Upload 1st group presentations

# III. How Has the Human Brain Evolved in the Terrestrial, Omnivorous Extractive Niche?

Tue February 15 - Introduction to the Social and Symbolic Brain
e-Coursepack: 09-Dunbar - Brains and Group Life
10-Manhart- Myths in the Brain

Thu February 17 - Brains, Language, and Tools e-Coursepack: 11-Stout et al - Language and Tool Making Supplementary Readings from Langdon

Tue February 22 - SECOND GROUP PRESENTATIONS: Adaptive
Aspects of the Human Brain

DUE 10 am on BLACKBOARD: Upload 2nd group presentations

Thu February 24 - Exam II - Covers the Human Niche, Key Anatomical and Physiological Adaptations, and Brain Adaptations

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

Tue March 2 - Human Cooperation, Culture, and Its

Ecological Impact
e-Coursepack: 12-Hill et al. - Cooperation, Culture, and
the Human Impact

Thu March 4 - Life History Theory - An Introduction e-Coursepack: 13-Ross - Primate Life Histories 14-Kramer & Ellison - Life Histories and Growth

Tue March 8 & Thu March 10 - NO CLASSES - SPRING BREAK

Tue March 15 - The Big Deal with Lactation
Text: Ellison - The Elixir of Life

Due in class: <u>Individual</u> Definitions and Diagrams of Life History Theory Key Concepts

Thu March 17 - Growing Up

Text: Ellison - Why Grow Up?

Tue March 22 - Environment, Work, and Reproduction
Text: Ellison - Balancing Act

Due in class: <u>Individual</u> Summary of Key Aspects of Human Female Reproductive Development, Physiology, and Behavior

Thu March 24 - Female and Male Reproductive Histories

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

Tue March 29 - Human Life Histories as Intertwined Life Histories

Text: Ellison - The Journey and the Procession

Due in class: <u>Individual</u> Summary of Key Aspects of Human Female and Male Reproductive and Offspring Investment Strategies

Thu March 31 - NO CLASS - Dr. Stutz away at the Society for American Archaeology Annual Meeting

Tue April 5 - Exam III - Covers the Life History Theory, Human Reproductive Biology, and Human Reproduction and Investment in Offspring as Evolutionary Strategies

# V. Case Study: The Ju Hoansi (!Kung San) Hunter-Gatherers of the Kalahari Desert Illustrate the Links Among Evolution, Behavior, Reproduction, and Growth.

Thu April 7 - Introduction to the Ju Hoansi (!Kung San)
e-Coursepack: 15-Yellen & Lee - Background to a Hunting
and Gathering Way of Life
16-Marshall - Sharing, Talking & Giving

Tue April 12 - Life History Stages of the Dobe !Kung Text: Howell - Chapters 1 and 2

Due in class: Group Summary of the Hunter-Gatherer Mode of Production

Thu April 14 - Growth and Caloric Intake in a Hunter-Gatherer Environment

Text: Howell - Chapters 3 and 4

Due in class: Group Summary of Hunter-Gatherer Life Stages

Tue April 19 - Producing Calories as a Hunter-Gatherer
Text: Howell - Chapter 5

Due in class: <u>Group</u> Summary of the Hunter-Gatherer Growth and Health Paradox

Thu April 21 - Social Ties: How a Hunter-Gatherer Gets and Uses Calories

Text: Howell - Chapters 6 & 7

Tue April 26 - The Fat Hypothesis: Parental Investment as a Key For Understanding the Foundations of Behavior

Text: Howell - Chapter 8

Due in class: <u>Individual</u> Essay on Hunter-Gatherer Behavior in Evolutionary Perspective

# VI. Conclusion: Developing an Evolutionary Perspective

Mon May 3 - Turn in Final Reflective Essay during the Final Exam period (2-4 pm, LANG 201)