ANTHROPOLOGY 110: INTRODUCTION TO HUMAN EVOLUTION  
FALL 2011  
MONDAY & WEDNESDAY 9:20-10:15, LECTURE CENTER 2

Instructor: Adam Gordon, Ph.D.  
Office: AS 246  
E-mail: agordon@albany.edu  
Office hours: Wednesday, 10:20 am to 12:20 pm, or by appointment. (NOTE: Please contact your TA regarding anything lab-related. If you need to reach me, the best way is to come to my office hours. The next best way is by e-mail. However, please be aware that I receive a large volume of student e-mails, so I will not be able to respond right away.)

Textbooks:  

Prerequisites: There are no required prerequisites for this class.

Lab Sections:  
(1029) Tuesday 8:45-9:40 pm  
(1030) Tuesday 11:45 am-12:40 pm  
(1032) Tuesday 2:45-3:40 pm  
(1033) Tuesday 4:15-5:10 pm  
(1028) Wednesday 1:40-2:35 pm  
(7146) Wednesday 2:45-3:40 pm  
(7147) Wednesday 4:15-5:10 pm  
(1031) Wednesday 5:45-6:40 pm

All labs meet in room AS 11 in the basement of Arts and Sciences.

Teaching Assistants:  
Caroline Antonelli  
Office: AS 209  
Office hours: TBA  
e-mail: carolineantonelli@gmail.com  
James Shuford  
Office: AS 206  
Office hours: TBA  
e-mail: james.shuford@gmail.com  
Courtney Kurlanska  
Office: AS 206  
Office hours: TBA  
e-mail: kurlanska@gmail.com

Course Objectives: This course provides students with a basic introduction to the facts, skills and concepts needed to understand human evolution. Topics covered include the history of evolutionary biology, human osteology, primatology, functional anatomy, and the human fossil record. This course provides a springboard to subsequent classes in Biological Anthropology and Human Biology.

Grading: Final grades will be given as A-E.

Academic Integrity: All graded work must be completed in accordance with the university’s Undergraduate Academic Regulations policy on Standards of Academic Integrity: http://www.albany.edu/undergraduate_bulletin/regulations.html
Textbooks and Website

Required Textbooks:


Note that the texts are designed to supplement the material presented in lecture, not to duplicate it. In addition, there will be instances in which the material presented in lecture contradicts or otherwise disagrees with material presented in the texts. In those cases, the material presented in lecture will be considered correct for the purposes of exams.

Course Website:

Course materials such as grades, lecture Power Point presentations, and this syllabus will be posted on Blackboard. In addition, course announcements such as amendments to this syllabus will be posted on Blackboard. Please note: I discuss several concepts in much greater detail in lecture than they appear on the slides, and some material covered in lecture does not appear on the slides at all. Do not expect to earn a good grade in this course if you try to learn the material from the online slides alone.

Course Requirements

Exams: There will be two exams given during the regular course of the semester plus a final exam. Exams may include questions drawn from lecture, lab, and any of the class texts. The midterms will focus on material since the previous exam, and the final exam will focus on the second half of the semester; however, be aware that the material in later parts of the course builds upon material in earlier parts of the course, so expect to see questions on later exams which incorporate concepts from earlier in the semester.

Lab assignments: A total of ten lab assignments will be due over the course of the semester.

Short Paper: This paper will answer questions about Lucy, the book by Johanson and Edey (1990). Specific details of this assignment are given on the last page of this syllabus. It will be due on October 26th at the beginning of lecture – no exceptions! If you know you won’t be able to make it to class that day, feel free to turn the paper in to your TA early.

Final Grade:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tr>
<td>Midterm exams</td>
<td>30% (Note: the higher score of your two midterms will count for 20%, the lower score for 10%)</td>
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<tr>
<td>Final exam</td>
<td>30%</td>
</tr>
<tr>
<td>Lab assignments</td>
<td>20%</td>
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<tr>
<td>Short paper</td>
<td>20%</td>
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Your final grade is based on your overall percentage according to the standard cutoffs. Below are the minimum percentages required for each grade:

A: 93.33%  A-: 90%  B+: 86.67%  B: 83.33%  B-: 80%  C+: 76.67%
C: 73.33%  C-: 70%  D+: 66.67%  D: 63.33%  D-: 60%  E: below 60%

Note on Extra Credit: I count the higher grade of your two midterms twice as much as your lower midterm exam grade. As a consequence, I do not allow students to complete extra credit assignments to bring up their final grade. Don’t even ask.
Course Policies

Make-up Exams: There will be no make-up exams. If you miss an exam, you will receive a zero for that exam. Exceptions will be made only 1) with proof of dire emergency or illness, 2) with advance notice of a compelling time conflict in some cases (see web link below), or 3) due to religious observance. I will not provide alternative exam times for students who have personal travel plans or commitments. Please refer to the “Attendance and Timely Compliance with Course Requirements” section of the university’s Undergraduate Academic Regulations for more details (http://www.albany.edu/undergraduate_bulletin/regulations.html).

Lecture Attendance: While it is important for you to attend every class, I will not take attendance in lecture. However, whether you come to class or not, you are responsible for keeping up with what happens in class. This applies to the content of the class, handouts, and announcements about class policies, events, deadlines, etc. In particular, I reserve the right to change deadlines and exam dates, and you will be held to those dates regardless of whether you were in class for the announcement or not. Announcements and amendments to this syllabus will be posted on Blackboard, but it is easy to miss other pertinent information if you are absent from class.

Lab Attendance: Unexcused absences from lab will result in a grade of zero for that day’s lab assignment. An excused absence from lab will result in that lab not counting as part of the final lab grade (i.e., your final lab grade would be averaged over nine labs instead of ten). The lab will not be made up. Ordinarily, excused absences will be granted only in cases of dire extenuating circumstances. Permission to miss an exam or lab should be obtained BEFORE the date of that lab or exam. Refer to the above website for details on excusable absences.

Grades: The grade you receive, either on an individual exam or assignment or as your final grade, is not subject to negotiation. It is your grade unless an error has been made. If you think an error has been made, let me know within one week of receiving the assignment or exam grade. **Important!** If you are struggling in the course, please come for help during the semester when there is still time for me to help you. Take advantage of my office hours or make an appointment with me. Do not wait until the course is over and ask me to change your grade because you are trying to graduate, you are on academic probation, or you have had a tough time with your personal life this semester. By then it is too late for me to help you.

Academic Integrity: Students who violate university policy on academic integrity are subject to disciplinary penalties, including the possibility of a failing grade for the course, disciplinary probation, suspension, or expulsion from the University. Prohibited activities include, but are not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor), or the attempt to commit such an act. For more information, refer to the section “Standards of Academic Integrity” in the Undergraduate Academic Regulations (http://www.albany.edu/undergraduate_bulletin/regulations.html).
### Lecture and Exam Schedule

#### Week 1
- **M 8/29** Introduction

- **W 8/31** History and principles of evolutionary biology I
  - Reading: Stanford Chapter 1

#### Week 2
- **M 9/5** NO CLASS

- **W 9/7** DNA: the molecular basis of heredity
  - Reading: Stanford Chapter 2

#### Week 3
- **M 9/12** History and principles of evolutionary biology II
  - Reading: Stanford Chapter 3

- **W 9/14** Species and speciation
  - Reading: Stanford Chapter 4

#### Week 4
- **M 9/19** Primate diversity I
  - Reading: Stanford Chapter 6

- **W 9/21** Primate diversity II

#### Week 5
- **M 9/26** Primate diversity III

- **W 9/28** Humans as primates and human variation
  - Reading: Stanford Chapter 5

#### Week 6
- **M 10/3** Primate ecology and behavior
  - Reading: Stanford Chapter 7

- **W 10/5** **EXAM 1**

#### Week 7
- **M 10/10** Principles of geology and paleontology
  - Reading: Stanford Chapter 8

- **W 10/12** History of the earth I

#### Week 8
- **M 10/17** History of the earth II

- **W 10/19** Primate origins and primate evolution
  - Reading: Stanford Chapter 9
<table>
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<tr>
<th><strong>Week 9</strong></th>
<th><strong>Week 10</strong></th>
<th><strong>Week 11</strong></th>
<th><strong>Week 12</strong></th>
<th><strong>Week 13</strong></th>
<th><strong>Week 14</strong></th>
<th><strong>Week 15</strong></th>
<th><strong>Exam Period</strong></th>
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<tr>
<td><strong>M 10/24</strong></td>
<td><strong>M 10/31</strong></td>
<td><strong>M 11/7</strong></td>
<td><strong>M 11/14</strong></td>
<td><strong>M 11/21</strong></td>
<td><strong>M 11/28</strong></td>
<td><strong>M 12/5</strong></td>
<td><strong>Th 12/15</strong></td>
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<td>Origin of bipedalism</td>
<td>Australopithecines II</td>
<td>Origin of the genus <em>Homo</em></td>
<td>Pleistocene climates</td>
<td>Neanderthals</td>
<td>Anatomically modern humans</td>
<td>Evolution of the human brain</td>
<td><strong>FINAL EXAM</strong></td>
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<tr>
<td><strong>Reading:</strong> Stanford Chapter 10</td>
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<td>Reading: Stanford Chapter 12 (pages 340 – 348)</td>
<td>Reading: Stanford Chapter 12</td>
<td>Reading: Stanford Chapter 13</td>
<td>Reading: Stanford Chapter 14</td>
<td>Reading: Stanford Chapter 15</td>
<td>(3:30-5:30 pm in Lecture Center 2)</td>
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<td><strong>W 10/26</strong></td>
<td><strong>W 11/2</strong></td>
<td><strong>W 11/9</strong></td>
<td><strong>W 11/16</strong></td>
<td><strong>W 11/23</strong></td>
<td><strong>W 11/30</strong></td>
<td><strong>W 12/7</strong></td>
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<tr>
<td>Australopithecines I</td>
<td><strong>EXAM 2</strong></td>
<td><em>Homo erectus</em> and its descendants</td>
<td>Middle Paleolithic / Middle Stone Age tools</td>
<td><strong>NO CLASS</strong></td>
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<td><strong>SHORT PAPER DUE AT BEGINNING OF CLASS. SEE ASSIGNMENT BELOW.</strong></td>
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**LAB SCHEDULE:**

| Week 1 (Aug. 29 & 31): | NO LAB |
| Week 2 (Sep. 5 & 7): | Lab 1. Human osteology I: The skull |
| Week 3 (Sep. 12 & 14): | Lab 2. Human osteology II: The postcranial skeleton |
| Week 4 (Sep. 19 & 21): | Lab 3. Human variation |
| Week 5 (Sep. 26 & 28): | NO LAB |
| Week 6 (Oct. 3 & 5): | Lab 4. Classification of the primates (WEEK OF EXAM 1) |
| Week 7 (Oct. 10 & 12): | Lab 5. Primate functional anatomy |
| Week 8 (Oct. 17 & 19): | Lab 6. The functional anatomy of bipedalism |
| Week 9 (Oct. 24 & 26): | Lab 7. The australopithecines |
| Week 10 (Oct. 31 & Nov. 2): | NO LAB (WEEK OF EXAM 2) |
| Week 11 (Nov. 7 & 9): | Lab 8. Early *Homo* |
| Week 12 (Nov. 14 & 16): | Lab 9. *Homo erectus* |
| Week 13 (Nov. 21 & 23): | NO LAB (THANKSGIVING) |
| Week 14 (Nov. 28 & 30): | Lab 10. Archaic and modern humans |
| Week 15 (Dec. 5 & 7): | Review Lab |
SHORT PAPER

DUE: October 26th at the beginning of lecture

Answer the following question based on the book *Lucy* by Johanson and Edey in 5–7 double-spaced pages using 12-point Times New Roman font and 1-inch page margins. **Put your Student ID# – NOT your name – and the name of your lab instructor on your paper.** This is a book report rather than a research paper, so there is no need to include citations or a bibliography.

**QUESTION:** During their analysis of fossils from Hadar and Laetoli, Donald Johanson, Tim White and their colleagues examine several features of the dentition, jaws, and skulls of apes and humans. In what way do apes and humans differ with respect to each of those features? Do the fossil hominids from Hadar and Laetoli more closely resemble humans or apes with respect to each of those features? How did these observations influence how Johanson and White interpreted these fossils?