ANTHROPOLOGY 5A: HUMAN ORIGINS

Course Description
This course introduces you to the physical, cultural, and cognitive development of modern humans from our distant ancestors to the present day. The course is divided into three discrete but mutually reinforcing sections:
1. Understanding the biology and theory behind evolution;
2. Identifying key behavioral and morphological features of ancestor and contemporary species including discussion of primates; and
3. Applying this knowledge to understanding the development of and variation in human societies from the Upper Paleolithic until the present.

The final part of the course is focused on assessing how evolutionary forces continue to shape our lives today. Although introductions to basic biological and archaeological principles are presented as context for the discovery and interpretation of fossil remains, no prior courses in archaeology or biology are required.

Lectures: Monday, Wednesday, Thursday 1:00 – 1:50pm
Lecture Location:

Course Head:
Dr. Lauren M. Santini, lsantini@brandeis.edu
Office: Brown 207
Office Hours: TBA and by appointment

Course Staff:
TF: Rebecca Friedlander, rfriedlander@brandeis.edu
Office Hours and Location: 11:00-12:30pm or by appointment

Important Note:
This syllabus will change, depending in part on where YOUR interests steer our discussions! When planning your work, please check the current syllabus rather than relying on prior versions.

Course Requirements

Course Materials
Readings will be assigned from the required course textbook with additional articles and book chapters made available for you on the course website. Readings will also include reputable, popular sources. These should be completed for the weeks indicated in the schedule, below, primarily by the third lecture when we hold discussions, though reading them by the week’s first lecture will help you digest material as it is presented in class. Because this field is subject to rapid change, readings are likewise subject to change at the discretion of the instructor. The optional readings are just that- optional! The semester is brief, and we unfortunately cannot move beyond scraping the surface of many
topics. These additional readings are there for your interest and can certainly be of use in constructing response papers.

**Required Text:**

**Lecture Slides:**
PDFs of the lecture slides will be posted to the course website following lectures.

**Attendance and Participation:**
Course attendance and participation in discussion are integral to learning and processing the information presented in our weekly meetings. The third course meeting of the week will often include discussion and/or lab activities rather than strictly lecture; the purpose of this is to give you the opportunity to discuss, engage with, and digest the material. Please come prepared, having reviewed the assigned readings. You should always feel comfortable asking questions during lecture!

**Professional Conduct**
This class may engender lively dialogue. Be passionate, but also be respectful of your fellow students. Open debate is expected and welcomed while maintaining a positive, professional, and challenging atmosphere.

**Pop-Quizzes:**
There will be a series of collaborative group pop-quizzes throughout the semester. These will include questions pertaining to that day’s lecture but should not be particularly strenuous. Each group member must turn in their own quiz.

**Quizzes:**
There will be a series of quizzes that are focused on scientific principles and phylogeny. These are meant to reinforce the foundational material. As noted above, these are separate from the miscellaneous pop quizzes.

**Short Responses:**
There are three, short essay responses (400-500 words. Word count is strictly enforced.). Your first paper will receive comments and two grades: a shadow grade- that being the grade you would have received if the paper had been formally graded, and a 100% provided it is turned in on time and with reasonable effort. This will give you feedback on your submission, your writing, your use of evidence, and the thinking behind it before you write the subsequent papers that count- you should treat this first paper just as seriously as you would the graded papers to maximize your benefit. Overall, these assignments will help you prepare for your exams and are designed to help you synthesize material, particularly in the case of controversial subjects, and address critically varying sides of the arguments to inform your own position. Note that while these papers are short, the restricted length makes their composition a challenge. Craft your arguments and choose your words, carefully. Include and communicate as much relevant knowledge and insight as possible. Remember to use peer reviewed sources to back yourself as evidence and how you cite those sources is critical. If you are unsure of
where to start, how to fit the word count, or what counts as an appropriate source, come see us! We are here to help you develop your writing and skills in critical analysis.

**Exams:**
There will be two exams. Format will include multiple choice, short answer written identifications, and two short essays. Three prompts will be provided for you to choose from. The final exam is not cumulative, though you may find it useful and appropriate to draw on foundational material from the first half of the course to make a point. Prior to each exam, there will be at least one comprehensive, staff-run review session to help you prepare.

**Grade Breakdown:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Quizzes:</td>
<td>10%</td>
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<tr>
<td>Collaborative Group Pop Quizzes:</td>
<td>10%</td>
</tr>
<tr>
<td>Short Responses:</td>
<td>30% (10% each)</td>
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<tr>
<td>Midterm Exam:</td>
<td>20%</td>
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<tr>
<td>Final Exam:</td>
<td>30%</td>
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**Late Policy and Extensions:**
Late assignments are marked down 10% for each day they are overdue. That having been said, we of course understand that life is unpredictable and that sometimes even the most conscientious individuals are unable to meet their goals on time. With that in mind, you get one free pass allowing you to turn in an assignment one day late, no questions asked, free of penalty, provided you notify your TF prior to taking the extension.

Extensions can be granted for students with foreseeable exceptional circumstances (such as senior thesis deadlines, athletics travel, etc., all of which require communication from your advisor/coach/supervisor) but not for typical circumstances (those being early vacations, or multiple papers or exams due around the same time). Illnesses excused by a note from UHS will also be pardoned.

**Missed Exams/Assignments:**
Unexcused exam absences will result in an automatic zero except in extreme, documented circumstances. This applies as well to missed assignments.

**Regrade Policy:**
It is acceptable to request reassessment of a graded assignment. The proper procedure is to first request a personal meeting with your TF for clarification in a timely manner. If, following that meeting, you would like the course head to regrade your assignment, that is perfectly acceptable, though understand that your grade can move in either direction and that the regrade is final. You may of course schedule a meeting with the course head to discuss your assignment before making the formal request.

**Academic Integrity:**
You are expected to be honest in all your academic work. Please consult Brandeis University Rights and Responsibilities for all policies and procedures related to academic integrity. Students may be required to submit work to TurnItIn.com software to verify originality. Allegations of alleged academic dishonesty will be forwarded to the Director of Academic Integrity. Sanctions for academic dishonesty can include failing grades and/or suspension from the university. Citation and research assistance can be found at LTS - Library guides.

**Accessibility:**
Brandeis seeks to welcome and include all students. If you are a student who needs accommodations as outlined in an accommodations letter, please talk with me and present your letter of accommodation as soon as you can. I want to support you. In order to provide test accommodations, I need the letter more than 48 hours in advance. I want to provide your accommodations but cannot do so retroactively. If you have questions about documenting a disability or requesting accommodations, please contact Student Accessibility Support (SAS) at 781.736.3470 or access@brandeis.edu.

**Class Meeting and Reading Schedule**

**Week 1:** August 28

**Class Meeting 1:** What to Expect – Course Introduction
- Introduction to the instructor and teaching staff, meet your classmates, course expectations, review of semester and syllabus, reading strategies

**Class Meeting 2:** Evolution, Genetics, Natural Selection

Readings/Media for the week:
- Coyne, J. A. *Why Evolution is True*
  - Introduction (xi-xx)
  - Chapter 1: What is Evolution? (1-19)
  - Chapter 2: Written in the Rocks (20-54)
  - Chapter 3: Vestiges, Embryos, and Bad Design (55-85)
  - Chapter 4: The Geography of Life (86-110)

Optional Readings:
- Darwin, C. *The Descent of Man* ([http://darwin-online.org.uk/content/frameset?itemID=F937.1&viewtype=text&pageseq=1](http://darwin-online.org.uk/content/frameset?itemID=F937.1&viewtype=text&pageseq=1))
  - Introduction (pages 1-5)
  - Chapter 3 (pages 70-106)

**Week 2:** September 4
 Evolution, Genetics, Natural Selection, and Sex
Readings/Media for the week:

- Coyne, J.A.
  - Chapter 5: The Engine of Evolution (111-143)
  - Chapter 6: How Sex Drives Evolution (144-167)
  - Chapter 1: Introduction (3-21)
- Reich, D. *Who We Are and How We Got Here*
  - Chapter 1: How the Genome Explains Who We Are (1-22)

**Week 3:** September 9
Primates, Chimps as Analogy

Readings/Media for the week:

- Marks, J. *What It Means to be 98% Chimpanzee.* (23-50)

Support Readings/Media:


**Week 4:** September 16
Pre-Australopithecines, the Last Common Ancestor, Bipedalism, and Taphonomy

Readings/Media for the week:

- Coyne, J. A.
  - Chapter 8: What About Us? (190-220)
- Lieberman, D. E.
  - Chapter 2: Upstanding Apes: How We Became Biped (25-47)

Taphonomy:


Optional Taphonomy Readings:
- Lyman et al. (2004): The Concept of Equifinality in Taphonomy (15-26)

**Thursday Activity**: analyze skull casts to establish general trends in hominin evolution

**Week 5**: September 23
Australopithecines

Readings/Media for the week:
- Lieberman, D. E.
  - Chapter 3: Much Depends on Dinner (43-66)
- Stringer, C. and Andrews, P.
  - The Complete World of Human Evolution (114-129)

**Week 6**: September 30
The genus *Homo, Homo erectus*

Readings/Media for the week:
- Lieberman Chapter 4: The First Hunter Gatherers (67-93)

OPTIONAL! submit questions to address for next week’s midterm review!

**Week 7**: October 7
Exam Review and Midterm Exam

**Week 8**: October 15
Archaic *Homo sapiens, H. neanderthalis, H. heidelbergensis*, Denisovans, and tool making

Readings/Media for the week:
• Reich, D.
  o Chapter 2: Encounters with Neanderthals (25-50)
  o Chapter 3: Ancient DNA Opens the Floodgates (54-74)
• High Pitched Voice Theory, Neanderthals: [https://www.youtube.com/watch?v=o589CAu73UM](https://www.youtube.com/watch?v=o589CAu73UM)

**Thursday Activity**: Flint Knapping with Sadie L. Weber

**Week 9**: October 21
Human Behavior: Modern Cognition, Language, Symbolism

Readings/Media for the week:
• Lieberman Chapter 6: A Very Cultured Species (126-153)


**Week 10:** October 28  
Why are We Like This? The Evolution of Morality and Group Cooperation

Readings/Media for the week: TBA

**Week 11:** November 11  
The Spread of Modern Humans

Readings/Media for lecture 1: Colonization of Australia, Polynesia, and Homo floresiensis  
TBA

Readings/Media for lecture 2: Colonization of the Americas  
TBA

**Week 12:** November 18  
Foraging to Farming: Domestication and Agriculture

Agriculture Readings/Media for the week:


**Week 13:** November 25  
Human Diversity, Genetic Variation
Readings/Media for the week:

- Reich, D.
  - Chapter 9: Rejoining Africa to the Human Story (208-225)
  - Chapter 10: The Genomics of Inequality (230-246)
  - Chapter 11: The Genomics of Race and Identity (248-273)

**Week 14**: December 2
Industrialization and The State We’re In: Evolutionary Forces at Play in Recent History

Readings/Media for the week:

- Lieberman, D. E.
  - Chapter 9: Modern Times, Modern Bodies (209-247)
  - Chapter 10: The Vicious Circle of Too Much (251-292)
  - Chapter 11: Disuse (293-317)

**Week 15**: December 9 (last day of class)
Closing remarks, the final picture

Readings/Media for the week:

- Lieberman, D. E.
  - Chapter 12: The Hidden Dangers of Novelty and Comfort (318-346)
  - Chapter 13: Survival of the Fitter (347-367)