Course objectives

This course covers the development of human physical and cultural endowments through a span of some 5 million years, from a hominoid stage and a foraging economy to the origins of agricultural practices and the rise of urban life. A consideration of humans’ place in nature as well as a review of evolutionary principles leads to discuss the archaeological findings of hominids in a diachronic framework. Further consideration is placed on the selective processes that led to the domestication of biomasses symbiotic with humans, and of the social causes and consequences of settled life. The journey through the bio-cultural transformations of humanity highlights the transition to bipedal locomotion, the acquisition of language, changes in subsistence economies, and an increase in societal complexity.

Learning goals

The aim of the course is for the student to have a basic and general understanding of the evolutionary paradigm as it applies to the biological and cultural makeup of humans. The major contributions from naturalists (Darwin and Wallace) as well as contributions from molecular biology help contextualize major biological transformations of the human clade and to understand the polytypic nature of contemporary human populations. Applied to the cultural domain, a critical evaluation of the evolutionary paradigm stresses the need to decouple the notion of “progress” from that of learned symbolic adaptations, and to construe the evolutionary process as non-teleological and multidirectional. Students will have the opportunity to develop their critical thinking and their writing skills by engaging in class discussions and submitting short documentary reviews.
### Course outline

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Topics</th>
<th>Readings</th>
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<tr>
<td>Jul M 10</td>
<td>Introduction to the course and to Latte</td>
<td>None</td>
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<tr>
<td>Jul T 11</td>
<td>Framing paradigms: Science and Anthropology</td>
<td>Cartmill 2000; Scott 2014; Marks 2002; Lewis et al. 2011</td>
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<td>Documentary: Judgment Day</td>
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<td>Jul Th 13</td>
<td>Inorganic dynamics of the blue planet: Plate tectonics and Pangaea History of evolutionary thought</td>
<td>Hallam 1976; Kurtén 1976</td>
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<td>Jul M 17</td>
<td>From Molecules to the Human Genome The synthetic theory of evolution</td>
<td>Whitlock 2014; Pääbo 2001; Stearns 2014; Baer 2014</td>
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<td>Documentary: Why Sex</td>
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<td>Review of What Darwin Never Knew due</td>
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<td>Jul T 18</td>
<td>The place of humans in nature Primates and Human Evolution</td>
<td>Williams 2010</td>
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<td>Documentary: Your Inner Monkey</td>
<td>Rodman 1999; Strier 2003</td>
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<td><a href="https://www.youtube.com/watch?v=txtOIV_EEks">https://www.youtube.com/watch?v=txtOIV_EEks</a></td>
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<td>Jul Th 20</td>
<td>Ethology of apes Paleoanthropology, time scales and chronology</td>
<td>Wundram 1979; Wilson et al. 2014</td>
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<td>Documentary: The Gorilla King</td>
<td>Sarich-Wilson 1967; Johanson and Edey 197*</td>
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<td><a href="http://www.pbs.org/wnet/nature/the-gorilla-king-video-full-episode/5377/?button=fullepidose">http://www.pbs.org/wnet/nature/the-gorilla-king-video-full-episode/5377/?button=fullepidose</a></td>
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<td>Midterm Posted</td>
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<td>Midterm due</td>
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<tr>
<td>Jul T 25</td>
<td>Australopithecines</td>
<td>White et al. 2009; Berger et al. 2010</td>
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<td>Documentary: The Story of Lucy</td>
<td>Gurche 2013a; Shipman 1986</td>
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<td>Documentary: Surviving Africa</td>
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<td><a href="https://www.youtube.com/watch?v=ZZhw6Ltfkc58">https://www.youtube.com/watch?v=ZZhw6Ltfkc58</a></td>
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Jul Th 27  Trade-offs of bipedal locomotion  
From quadruped to biped: how and why?  
Krogman 1959; Winder et al. 2014; Thorpe et al. 2014; Lovejoy 1981;  
Falk 1997.

Jul M 31  Habilines and Ancestral Homo  
The Quest for Fire  
Berger et al. 2015; Gurche 2013b and 2013c; Etler 1996;  
Brown et al. 2004; Jacob et al. 2006

**Documentary: The Birth of Humanity**  
https://www.youtube.com/watch?v=pzmZjO1RDOQ

**Documentary: Alien from Earth**  
https://www.youtube.com/watch?v=SDtxa6Bk2k

Aug T 1  Archaic Homo sapiens and Neanderthals  

**Documentary: Decoding Neanderthals**  
https://www.youtube.com/watch?v=BTMEDQmfOLk

**Documentary: The Neandertal remains from El Sidron**  
https://www.youtube.com/watch?v=ki3rWqtAf8o

Aug Th 3  Anatomically modern humans  
Origins of language and other symbolic adaptations  
Willoughby 2007; Lewin 1987; Templeton 2002  
Burling 1993; Pinker 2003; White 1992

**Documentary: First Peoples-Africa**  
https://www.youtube.com/watch?v=2B2Xofn9sgQ

**Documentary: The Mind’s Big Bang**  
https://www.youtube.com/watch?v=isOdID05YVg

Aug M 7  Ancient Human Diasporas  
Grayson-Meltzer 19**;  
Fagan 2001; Straus et al. 2005; Bradley-Stanford 2006

**Documentary: First Peoples-The Americas**  
https://vimeo.com/159704955

**Review of Documentary First Peoples-The Americas due**

Aug T 9  The iconography of human evolution  
**Take-home final exam posted**  
**(due on Friday August 11, no later than 5pm)**  
Moser 1996; Conniff-Giller 2014

**Students with extra challenges**
If you are a student with a documented disability at Brandeis University and if you wish to request a reasonable accommodation for this class, please see me immediately. Keep in mind that reasonable accommodations are not provided retroactively.
**Four-Credit Course (with three hours of class-time per week)**

Success in this 4 credit hour course is based on the expectation that students will spend a minimum of 9 hours of study time per week in preparation for class (readings, response to questions, preparation for discussions, writing of papers, preparation for exams, etc.).

**Reading assignments**

Reading assignments should be completed by the dates indicated above. Reading of these materials is essential for your participation in class (15% of the total grade). Throughout the summer session, you will reflect critically on the readings and generate thoughtful questions about the material. You should prepare and type at least one question from each assigned reading that both reflect your comprehension of the readings and highlight salient points that you think will contribute to the discussion of the readings. Participation is graded based on the submissions and the assessment of your typed and printed questions. Attendance to class is obligatory. Absence from classes will only be accepted in cases of medical or extreme emergencies, and should be timely notified in person or by email.

**Writing assignments**

There are two written reviews of the videos *What Darwin Never Knew* and *First Peoples-the Americas*. Each should have a maximum of three double-spaced typed pages. The reviews need to address three points: 1) A synthetic summary of the core ideas, a critical evaluation of the main points, and a general assessment of the effectiveness of the video. The first review counts 10% of the final grade and the second 15%.

**Exams**

There will be two exams (each 30%). Each examination will include an essay. The essays are intended to foster critical thinking by comparing and contrasting assumptions, statements, or theoretical positions from different authors. The tests are not accumulative; that is, the final exam will cover only topics discussed after the midterm.

**Summary of grading**

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<th>Component</th>
<th>Percentage</th>
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<tr>
<td>Class participation</td>
<td>15%</td>
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<td>Midterm exam</td>
<td>30%</td>
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<td>Final exam</td>
<td>30%</td>
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<tr>
<td>First video review</td>
<td>10%</td>
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<tr>
<td>Second video review</td>
<td>15%</td>
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**Use of laptops and tablets**

Students are welcome to use a laptop computer or a tablet in class provided it is used for note taking or for web searches specifically related to the topic being discussed. If a student is found using the laptop for other purposes, his/her right to use it will be immediately suspended for the rest of the summer session. The use of phones is not permitted.
Academic Integrity
Academic integrity is central to the mission of educational excellence at Brandeis University. Each student is expected to be familiar with, and to follow, the University’s policies on academic integrity. Please consult Brandeis University Rights and Responsibilities (http://www.brandeis.edu/studentaffairs/srcs/rr/) for all policies and procedures. All policies related to academic integrity apply to in-class and take home projects, assignments, exams, and quizzes. Students may only collaborate on assignments with express permission. 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.

Readings (on LATTE)

Allen, Garland, E.

Benefit, Brenda R., and Monte L. McCrossin

Berger, Lee, R. et al.

Bradley, Bruce, and Dennis Stanford

Boyd, Robert, Peter J. Richerson, and Joseph Henrich

Burling, Robbins

Cartmill, Matt

Conniff, Richard and Geoffery Giller

Dawkins, Richard


Delson, Eric, and Ian Tattersall

Etler, Dennis

Fagan, Brian

Falk, Dean

Fiedel, Stuart, and Gary Haynes

Grayson, Donald K., and David J. Meltzer

Gurche, John


Hallam, A.

James, Steven, R., et al.

Johanson, Donald, and Maitland A. Edey

Krogman, Wilton, M.

Kurtén, Björn

Lewin, Roger

Lewis, Jason E., et al.

Lovejoy, C. Owen

Marks, Jonathan
2002 Science, Religion and Worldview. In What It Means to Be 98%

Moser, Stephanie

Pääbo, Svante

Pinker, Steven

Rendu, William, et al.

Rougier, Helene, et al.
2016 Neandertal cannibalism and Neandertal bones used as tools in Northern Europe. Nature, Scientific Reports| 6:29005 | DOI: 10.1038/srep29005

Sarich, Vincent, M., and Allan C. Wilson

Scott, Eugenie, C.

Shipman, Pat

Straus, Lawrence Guy, David J. Meltzer, and Ted Goebel

Tattersall, Ian
2012 Who were the Neanderthals? In Masters of the Planet: in search for our human origins, pp. 159-177. Palgrave, MacMillan, New York.
Templeton, Alan R.

Thorpe, Susannah, K.S., Juliet M. McClymont, and Robin H. Crompton

White, Randall

White, Tim, et al.

Whitlock, Michael, C.

Williams, James C.

Willoughby, Pamela R.

Wilson, Michael, L., et al.

Winder, Isabelle, C., et al.
2014 Human bipedality and the importance of terrestriality. Antiquity **: 915-916.

Wood, Bernard

Wundram, Ina Jane