Human Origins (ANTH 153)

Monday Wednesday Friday
10:20 - 11:20 AM
Asbury Hall 007

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Office location: Asbury Hall 205D
Office hours: 1:00-2:30 PM Monday, 1:00-2:00 PM Thursday, and by appointment

Why Does This Course Matter?

Have you ever imagined what life would be like if you had a kangaroo pouch? Or the lower limbs of a praying mantis? How about gills to breathe underwater? It’s easy to assume that humans were destined to look the way that we do, but in fact nothing is predetermined about evolution. So, then, why don’t we have a pouch or gills? Why do we walk on two legs? And why are we so different from every other animal on earth in term of our cognitive abilities—speaking language, making art, and asking ourselves such questions? This course will begin to unravel those mysteries for you.

Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>How This Course Will Help</td>
<td>2</td>
</tr>
<tr>
<td>What Texts to Buy or Rent</td>
<td>2</td>
</tr>
<tr>
<td>Summary of Due Dates</td>
<td>3</td>
</tr>
<tr>
<td>How to Succeed</td>
<td>3</td>
</tr>
<tr>
<td>Progress and Grading</td>
<td>4</td>
</tr>
<tr>
<td>Assignment Details</td>
<td>4</td>
</tr>
<tr>
<td>Attendance</td>
<td>6</td>
</tr>
<tr>
<td>Late Work</td>
<td>6</td>
</tr>
<tr>
<td>Academic Integrity</td>
<td>6</td>
</tr>
<tr>
<td>Additional Assistance</td>
<td>7</td>
</tr>
<tr>
<td>Course Reading Schedule</td>
<td>8</td>
</tr>
</tbody>
</table>
How This Course Will Help

We have two main tasks for the semester. First, I want you to understand basic human evolutionary history—how we got here. Second, I want you to understand how scientists have reconstructed that history—how we know what we know about human origins. Toward this end, we will explore how scientists have used different types of data (including fossils, artifacts, DNA, and the behavior of living apes) to understand the human past. We will also consider how our understanding of human origins has changed and continues to change as new data become available.

Human evolution is widely misunderstood and misrepresented in popular culture. By the end of the semester, you should be a critical consumer of how human ancestors and human evolution are represented in popular media. This course is also designed to help you sharpen your critical reading skills, practice clear verbal communication of your ideas in class discussion, develop your presentation and discussion leadership skills, and improve your ability to write reflectively and integrate ideas from different sources in your writing.

What Texts Do You Need to Buy or Rent?

You will need access to the following two books for the course. All other assigned readings will be posted as pdfs in Moodle or placed on reserve in the library.


In addition, a $7 fee will be charged to your student account to cover the cost of experiential learning in the course, including making stone tools, throwing spears, and hosting a demonstration from an expert stone tool maker.
When Are Assignments Due? When Will Tests Happen?

Please note that there will be a four-minute, two-question open book reading quiz on Moodle due before every class period excluding lab days and exams.

2/15: Student Presentation/Activity Day (if you’re presenting, your topical paper is due)
2/20: Student Presentation/Activity Day (if you’re presenting, your topical paper is due)
2/25: Exam 1
3/11: Student Presentation/Activity Day (if you’re presenting, your topical paper is due)
3/15: Student Presentation/Activity Day (if you’re presenting, your topical paper is due)
3/22: Research paper proposal and annotated bibliography due via Moodle before class
4/1: Student Presentation/Activity Day (if you’re presenting, your topical paper is due)
4/5: Exam 2
4/10: Student Presentation/Activity Day (if you’re presenting, your topical paper is due)
4/22: Draft of research paper due via Moodle by 4 PM
5/6: Final research paper due
5/11: Final Exam (8:30-11:30 AM)

How to Succeed in This Course

Engage: Come prepared to actively engage in this course. I have found this is the best way to enhance your learning. Prepare to engage deeply by reading all assigned material carefully prior to class, taking careful notes in class, and participating in class discussion. Your comments and questions make the class a more rewarding and more fun learning experience for your classmates and for me. *Laptop and cell phone use is generally prohibited during class sessions.* If you have a special situation that requires you to use a laptop to take notes, talk to me.

Communicate: Human evolution may be a completely new area of study for you. Your success is important to me. Please let me know when the course material is unclear. I am here for you. Let me know in class if I need to explain something again, write a term on the board, or slow down. I welcome these requests and directions from students because they benefit our shared learning community. *I will not be offended if you tell me I’m not making any sense—I will be grateful that you let me know.*

Connect: Please feel free to swing by during office hours or make a special appointment to see me. I am always happy to meet with students outside of class if they want to discuss class material, work on assignments, prepare for exams, or just chat. Please also remember that your classmates are an asset to your learning. Talk to them! Study with them!
How Will You and I Evaluate Your Progress?

I have designed this course to include a variety of types of assignments, including papers, exams, and presentations. These assignments are designed around my four learning objectives. In this course, you will

- learn basic human evolutionary history,
- understand the methods by which scientists have reconstructed that history,
- analyze scientific data about human evolutionary history, and
- evaluate competing scientific theories about various aspects of human evolution.

<table>
<thead>
<tr>
<th>Course Requirement</th>
<th>Percentage of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class participation</td>
<td>10%</td>
</tr>
<tr>
<td>Moodle reading quizzes</td>
<td>5%</td>
</tr>
<tr>
<td>Group presentation/activity leadership</td>
<td>5%</td>
</tr>
<tr>
<td>Topical Paper</td>
<td>10%</td>
</tr>
<tr>
<td>Research Paper</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>16.5%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>16.5%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>22%</td>
</tr>
</tbody>
</table>

Please remember that at DePauw, A and A- grades reflect “achievement of exceptionally high merit.” B+, B, and B- grades indicate “achievement at a level superior to the basic level.” C+, C, and C- grades reflect “basic achievement,” and D+, D, D- grades reflect “minimum achievement that warrants credit.” B grades in this course reflect very good work; a “B” is not a poor grade in this or any other course at DePauw. C grades also indicate basic mastery of the material.

A 93+; A- 90-92.999; B+ 87-89.999; B 83-86.999; B- 80-82.999; C+ 77-79.999; C 73-76.999; C- 70-72.999; D+ 67-69.999; D 63-66.999; D- 60-62.999; F <60

Exercise and Assignment Details

Class Participation: This course will include both lecture and discussion components, and class participation is essential. Class participation means attending all classes, arriving on time, volunteering to speak when you have a chance, demonstrating that you are well prepared for class by offering thoughtful comments/questions, and sometimes pushing yourself to make more rigorous, analytical, or imaginative points. I expect everyone to be respectful of other people’s ideas and opinions. While we can and should debate issues, we should not attack other people personally for the ideas they express in class. Class participation accounts for 10% of the course grade.
Moodle Reading Quizzes: Every day we meet as a class, before class, students will take a timed, four-minute, two-question, open-book reading quiz in Moodle on the day’s reading. These quizzes will together count for 5% of the course grade. The lowest two quiz scores will be dropped. Quizzes are not given on days we have labs or exams.

Group Student Presentation and Activity Leadership: Over the course of the semester, each student will present once as part of a group on a day’s topic. The topics for student presentations are: (1) Do Chimpanzees Have Culture?; (2) Do Chimpanzees Use Language?; (3) Why Did Our Ancestors Start to Walk on Two Legs?; (4) The Role of Hunting and Violence in Human Evolution; (5) How Did the Control of Fire Influence Human Evolution?; and (6) Why Did Neandertals Go Extinct?. In preparation, students who are presenting will read additional peer-reviewed journal articles about the day’s topic that I assign.

You are responsible for 30-to-40 minutes of class time the day that you present, including a 15-to-20-minute presentation and a 15-to-20-minute interactive activity for the class. The interactive activity could be a game, small group discussion, etc. Feel free to be creative, just be sure not to be boring. Remember that every group member should speak about the same amount during the presentation and activity periods, and your group will be marked down if just a few students from the group dominate the presentation and activity. This assignment is worth 5% of your course grade.

Topical Paper: On the day you present in class as a group, you will each individually turn in a 3- to 5-page thesis-driven paper about the day’s topic, incorporating evidence from the class readings and the extra assigned readings that you did in preparation for leading class. This paper is worth 10% of your course grade.

Research Paper: You will develop a 6-to-8-page paper on a topic relevant to the course topic. The project has multiple parts including (1) research appointment with librarian (0%), (2) paper title, proposal, and annotated bibliography with a five-source minimum (0%), (3) rough draft (0%), and (4) final research paper (15%). Although no points are awarded for the first three parts of the assignment, failure to do them thoughtfully will cause points to be deducted from your research paper grade. No library consultation: -3 points. No proposal/preliminary bibliography: -5 points. No rough draft: -7 points. All of these assignments are designed to improve your research project; therefore, it is to your advantage to do them. I reserve the right to reject an unauthorized term paper topic.

Exams: Three exams will be given over the semester. Exam 1 and Exam 2 are each worth 16.5% of your course grade. The final exam, which is cumulative, is worth 22% of your course grade.
**What if I Miss Class?**

Participation and attendance are very important to your success in this course. Remember, you cannot participate if you are not there! **If you know you are going to be absent, make sure to contact me before class.** In the event of an unexpected emergency, please contact me as soon as possible—and be sure to do so before the next scheduled class. It is your responsibility to get all information you missed on any days you were absent.

Acceptable reasons for an excused absence include family emergency, serious illness, religious holiday, and participation in college athletic competitions. Please note that excessive absences, even when excused, will negatively impact your participation grade and your final course grade at my discretion. Students with unexcused absences will receive no participation credit for the days they are absent. Typically, no more than three excused absences are permitted over the course of the semester. If you have more than six absences, you may not be eligible to continue in the course whether these absences are excused or unexcused.

**What if I Miss a Deadline?**

All papers are due in class on the due dates listed. On the due date, a paper submitted later in the day is eligible for 95% of original points. A paper submitted one day late is eligible for 90% of original points. A paper submitted two days late is eligible for 80% of original points. A paper submitted three days late is eligible for 70% of original points. I will not accept assignments more than three days late. If you have an emergency, contact me before class.

Make-up examinations and quizzes are given only if a serious illness or family emergency prevents a student from taking the exam or quiz at the scheduled time. If a religious holiday or college athletic competition conflicts with an exam time, please let me know in the first two weeks of class so that we can plan for your accommodation. If you miss the exam (or quiz) unexpectedly because of a serious illness or family emergency, let me know within 24 hours of the missed exam (or quiz) time.

**Academic Integrity**

Please familiarize yourself with DePauw’s Academic Integrity Policy. I take academic dishonesty, including plagiarism, very seriously, and at DePauw such misconduct can have a variety of serious consequences. If you are at all unsure what constitutes plagiarism, please ask. **If you get behind or overwhelmed, please talk to me.** Students in this course will include the following pledge on all assignments and exams: "On my honor, I pledge that I have neither given nor received unauthorized help on this assignment."
Additional Assistance

DePauw has some great resources to help to improve your performance in this and other courses.

**W-Center (Asbury Hall, Room 115):** Peer tutors are available to help you work on your paper’s thesis, organization, development, and voice; they can also help with brainstorming, punctuation, spelling, and grammar. Call (765) 658-4039 or stop by the Academic Resource Center (Asbury Hall, Room 115) to make an appointment.

**S-Center (Asbury Hall, Room 121):** Peer tutors are available to help you prepare for your group class presentation (including both your oral performance and your use of effective visuals). They can also work with you to develop your class discussion skills. Call (765) 658-4039 or stop by the Academic Resource Center (Asbury Hall, Room 115) to make an appointment.

**Academic Success Services (Student Academic Life, Memorial Union):** Peer tutors are available to help you develop individualized strategies in the areas of study skill development, time management, goal setting, organization, and prioritizing. Tutors meet with students on an individual basis, or upon request, in small groups. Contact Benjamin Hogan, Student Success and Retention Specialist, at (765) 658-4112 or benjaminhogan@depauw.edu to make an appointment.

**Counseling Services (DePauw Health Wellness Center, 800 S. Locust Street):** Counselors at DePauw specialize in concerns common among college students, such as personal stress and anxiety, depression, academic- and career-related concerns, relationship concerns, identity development, and substance use. Please call (765) 658-4268 or email counselingservices@depauw.edu to make an appointment.

**Student Disability Services:** If you need accommodations, you have a right to have these met. If you have a documented disability, please contact Student Disabilities Services to arrange for any needed accommodations, such as extended test-taking time or the right to take tests in an environment with fewer distractions. Also, if you suspect that you have a disability but don’t yet have documentation, please reach out to Student Disability Services (see contact information on the next page).
Disabilities entitled to accommodation include mobility impairments, hearing or vision issues, speech impairments, learning disabilities, ADD, ADHD, psychological disabilities, neurological impairments, traumatic brain injury, and chronic medical conditions such as migraines, AIDS, cancer, and diabetes. DePauw University’s ADA syllabus statement is as follows: “It is the policy and practice of DePauw University to provide reasonable accommodations for students with properly documented disabilities. Written notification from Student Disability Services is required. If you are eligible to receive an accommodation and would like to request it for this course, please contact Student Disability Services. Allow one week advance notice to ensure enough time for reasonable accommodations to be made. Otherwise, it is not guaranteed that the accommodation can be provided on a timely basis. Accommodations are not retroactive. Students who have questions about Student Disability Services or who have, or think they may have, a disability (psychiatric, attentional, learning, vision, hearing, physical, medical, etc.) are invited to contact Student Disability Services for a confidential discussion in Union Building Suite 2 or by phone at 658-6267.”

**Course Reading Schedule**

Please note that readings labeled “M” are posted on our Moodle course page and readings labeled “B” are from one of our two required books in the course.

**Monday, 1/28: What Defines Humans?**

**Wednesday 1/30: What is Archaeology? What is Physical Anthropology?**
Bower, Bruce 2013. “Cannibalism in Colonial America.” (M)

**THEME 1: HOW EVOLUTION WORKS**

**Friday 2/1: What is Science? What is Evolution?**
Charlesworth, Brian and Deborah Charlesworth. 2017. “The Processes of Evolution,” pages 4-10. (B)
Tattersall, Ian. 2008. “What’s So Special about Science?” (M)

**Monday 2/4: How Evolution Works**
Charlesworth, Brian and Deborah Charlesworth. 2017 “Adaptation and Natural Selection,” pages 61-91. (B)

*Monday 2/4: Deadline to drop or add Spring Term 2018 classes*
Wednesday 2/6: Evolution in Action
Charlesworth, Brian and Deborah Charlesworth. 2003. “The Formation and Divergence of Species,” pages 92-111. (B)
Kaplan, Sarah. 2016. “These Fish Evolved to Survive the Most Poisoned Places in America.” (M)

Friday 2/8: The Evidence for Evolution

THEME 2: OUR CLOSEST LIVING RELATIVES

Monday 2/11: What are Primates?

Wednesday 2/13: What are Apes?

GO TO http://pin.primate.wisc.edu and read the fact sheets for the following species: Hylobates lar (Lar gibbons); Pongo sp. (orangutans); Gorilla sp. (gorillas); Pan paniscus (bonobos); Pan troglodytes (chimpanzees). Each student group will present about one species in class.

Friday 2/15: Do Chimpanzees Have Culture? (Student Presentation/Activity Day)

Monday 2/18: Are Chimpanzees Self-Aware? Are Chimpanzees Aware of What Others Know and Feel?
Caruso, Catherine. 2016. “Chimps May Be Capable of Comprehending the Minds of Others” (M)
Fouts, Roger. 2000. “My Best Friend is a Chimp:’ One-on-One with Our Closest Cousins.” (M)

Wednesday 2/20: Do Chimpanzees Use Language? (Student Presentation/Activity Day)
“Gestures of Intent.” 2007. (M)
Friday 2/22: Are Chimpanzees Altruistic? Are Chimpanzees Moral?
de Waal, Frans. 2014. “Goodness Explained.” (M)

Monday 2/25: Exam 1

THEME 3: HUMAN ORIGINS

Wednesday 2/27: What are Fossils?
Lewis, Danny. 2015. “How to Become a Fossil in Five Easy Steps.” (M)

Friday 3/1: Who Were the Earliest Human Ancestors?
Harmon, Katherine. 2013. “Shattered Ancestry.” (M)
Stringer, Chris and Peter Andrews. 2012. “Late Miocene Apes and Early Human Ancestors” (excerpt), pages 114-117. (B)

In-Class Library Demonstration with Tiffany Hebb

Monday 3/4: Understanding Australopithecines and Their Anatomy
Stringer, Chris and Peter Andrews. 2012. “Australopithecus africanus” and “Robust Australopithecines” (excerpt), pages 124-129. (B)

GO TO http://humanorigins.si.edu/evidence/human-family-tree and read about the australopithecine species your group has been assigned: Au. anamensis, Au. afarensis, Au. africanus, Au. garhi, Au. sediba, robust australopithecines (Au. boisei, Au. aethiopicus, Au. robustus—note genus name is listed as Paranthropus on the Smithsonian webpage).

Wednesday 3/6: How Do Australopithecines Fit into Our Family Tree?
Wong, Kate. 2012. “First of Our Kind.” (M)

Friday 3/8: Lab Day: Estimating Australopithecine Height
“Laetoli Footprints Trail.” 2016. (M)

Monday 3/11: Why Did Our Ancestors Start to Walk on Two Legs? (Student Presentation/Activity Day)
Stanford, Craig. 2003. “What Do You Stand For?” (M)
Wednesday 3/13: Why Did Our Ancestors Lose Their Fur?

Friday 3/15: The Role of Hunting and Violence in Human Evolution (Student Presentation/Activity Day)
Wong, Kate. 2014. “Rise of the Human Predator.” (M)

Monday 3/18: Hunter or Hunted?

Theme 4: Our Genus Emerges

Wednesday 3/20: Origins of the Genus Homo
Morin, Monte. 2015. “Jawbone Points to Climate's Role in Human Evolution.” (M)

Friday 3/22: Homo erectus: Out of Africa

Research paper proposal and annotated bibliography due via Moodle before class

Friday 3/22: Last day to withdraw from a course with grade of W, change from P/F to grade, change from grade to P/F.

Monday 3/25-Friday 3/29: No class (Spring Break)

Monday 4/1: How Did the Control of Fire Influence Human Evolution? (Student Presentation/Activity Day)
Miller, Kenneth. 2013. “Fire Starter.” (M)

Wednesday 4/3: Lab Day: Making and Using Stone Tools
Barnett, Adrian. 2006. “Art of Stone.” (M)

Friday 4/5: Exam 2

THEME 5: HOMO SAPIENS AND OTHER RECENT HOMO SPECIES

Monday 4/8: Introducing Neandertals
Wong, Kate. 2015. “Neandertal Minds.” (M)

Wednesday 4/10: Why Did Neandertals Go Extinct? (Student Presentation/Activity Day)
Ian Gilligan. 2007. “Neandertal Extinction and Modern Human Behaviour: The Role of Climate Change and Clothing.” (M)
Sutcliffe, Theodora. 2016. “When Neandertals Replaced Us.” (M)
Wong, Kate. 2009. “Twilight of the Neandertals.” (M)

Friday 4/12: Lab Day: Atlatls, Throwing Distance, and Throwing Accuracy

Stringer, Chris and Peter Andrews. 2012. “Models of Recent Human Evolution” and “Africa—Homeland of Homo sapiens?” page 140-143 and 158-161. (B)

Wednesday 4/17: Origin of Anatomically Modern Humans: The Multiregional Model

Friday 4/19: Origin of Anatomically Modern Humans: Evolving Views
Barras, Colin. 2016. “Your Inner Extinct Humans.” (M)

Monday 4/22: Our Hobbit Cousin: *Homo floresiensis*
Bower, Bruce. 2016. “Hobbit History Gets New Beginning.” (M)
Stringer, Chris and Peter Andrews. 2012. “*Homo floresiensis,*” pages 174-175. (B)
Stringer, Chris. 2014. “Small Remains Still Pose Big Problems.” (M)

*Draft of research paper due via Moodle by 4 PM*

Wednesday 4/24: New Frontiers for Modern Humans: Australia and the Americas

THEME 6: BECOMING US

Friday 4/26: An Intellectual Leap Forward?
Feder, Kenneth L. 2013 “Expanding Intellectual Horizons” (excerpt). (M)

Monday 4/29: Stone Tool-Making Demonstration with Mr. Ed Mosher

Wednesday 5/1: The Origins of Language

Sulawesi, Indonesia (40,000 years old)

Friday 5/3: The Origins of Symbolism and Art
Monday 5/6: Why Do We Live So Long?
Weiler, Nicholas. 2015. “Menopausal Killer Whales are Family Leaders.” (M)

Final research paper due in class

Wednesday 5/8: How Does Evolution Affect Us Today?
DeSilva, Jeremy. 2013. “Starting Off on the Wrong Foot.” (M)
Greenwood, Veronica. 2014. “You’re Not Highly Evolved.” (M)
Hawks, John. 2014. “Still Evolving (After All These Years).” (M)

Saturday 5/11: Final Exam, 8:30-11:30 AM