

ANTH2810/UGEB2502 Human Evolution

Term 2

Lecture time: Mondays 14:30 – 17:15 (1/9 – 24/11) UCC-201

Instructor: Chris Cheung (christina.cheung@cuhk.edu.hk) NAH322

Textbook: Standford, Allen, and Antón (2016) Exploring Biological Anthropology: The Essentials (Fourth edition). Pearson. ISBN-13: 978-0-13-401401-2

Course description: What does it mean to be human? Where did we come from? Where are we going? This course investigates long-term evolutionary perspectives on the human species. The basics of evolution and natural selection as scientific theories are clearly set out and examined, and common misconceptions discussed. Evidence for the evolution of mammals and primates is reviewed and discussed, and the common characteristics of these species are highlighted, demonstrating the connections between humans and other forms of life. The course covers what we know about human ancestors and the evolution of modern humans. Students are introduced to the wide range of human adaptations to local conditions across contemporary cultures and the variety of relationships that human populations have with the environment. Students are encouraged to use the knowledge they have acquired to ask: are these relationships always sustainable? Looking to the future: what are our responsibilities both to future generations of humans and towards other species with which we share our world? This course aims to give students an understanding and appreciation of evolutionary perspectives on the place of humans in the world, the variety of contemporary human societies, and a broad perspective on the complexity of the relationship between humans, the environment, and other species.

Learning outcomes:

In this course students learn about the nature of scientific theories and their development, as well as the use of evidence in evaluating hypotheses. Students are also exposed to the potential for misunderstandings of scientific theory and the distinction between fact and value. Comparative abilities are emphasized through reviewing common features of the life-course of a variety of animals and the influence of animal habitats, with particular focus on closely related primate species.

The history of human evolution is introduced to students, focusing on the emergence of universal capacities such as language, technology, art, and culture. Students are encouraged to learn about and appreciate the variety of human cultures and the flexibility of humans in adapting to local environments. A comparative perspective on human culture is encouraged through a focus on the common subsistence needs of all humans, and the variety of practices by which these needs are met.

Students are exposed to a wide perspective on the place of the human species in the world. They are encouraged to exercise long-term evaluation of, and exercise a sense of judgement about the impact and sustainability of human action, both in relation to the environment and other species as well as future generations of the human species. Students are thus encouraged to think about their own place in society.

Course structure and learning activities:

One 2-hour 45 min lecture per week for one semester. Classes will take various forms, mostly lectures, but also include a field trip and other activities.

Course assessment and polices:

The final grade for the course is based on:

1) Field trip report		20%
2) In-class quizzes		10%
3) In-class assessments x2	(20% + 35%)	55%
4) Final essay		15%

Field trip report (20%)

Students will write a 5 – 8 pages report on the field trip. More direction will be provided in class and during the field trip. This is due **13 Oct** before the end of the day.

In-class quizzes (10%)

There will be 10 quizzes (through uReply) throughout the semester. An average will be calculated from your best 8 attempts. These quizzes will be heavily based on the lectures.

In-class assessments (20 + 35%)

These in-class assessments will be based heavily on the lecture material, and your notes from in-class lectures will be your primary study materials. Reading the associated chapter(s) from the textbook is highly recommended.

Short paper (15%)

Students will write a short paper (4 – 5 pages) on the following topic: how can a better understanding of our own evolutionary history help us to navigate the future of our species? More direction will be provided in class. This is due **1st Dec**.

Submission and academic honesty

As required by the university, from Sept. 2008, students must submit a soft copy of their computer-generated text assignments to VeriGuide at a specified URL. The system will issue a receipt containing a declaration of honesty statement. Students should sign the receipt, print

a hard copy of their assignment, and submit the hard copy and the receipt to teachers for grading. The university says that assignments without the receipt will not be graded. Please check the website “Honesty in Academic Works” at: <http://www.cuhk.edu.hk/policy/academichonesty/> for more information on plagiarism and on how to submit papers through VeriGuide.

Concerning AI use, students are **not allowed** to use any AI tools in any kind of learning activity or assessment that will be counted towards students’ final grade of the course, or used for evaluating students’ attainment of the desired learning outcomes. Students are expected to produce their own work independently without any collaboration or use of AI tools.

Grade descriptors

Grade	Overall course
A	Outstanding performance on all learning outcomes.
B	Substantial performance on all learning outcomes, OR high performance on some learning outcomes which compensates for less satisfactory performance on others, resulting in overall substantial performance.
C	Satisfactory performance on the majority of learning outcomes, possibly with a few weaknesses.
D	Barely satisfactory performance on a number of learning outcomes.
F	Unsatisfactory performance on a number of learning outcomes, OR failure to meet specified assessment requirements.

Weekly schedule (this syllabus is subject to change)

Date	Lecture Topic
Sept 1	1. Introduction: Orientation and Course Overview Reading: Textbook chapters 1 and 2
8	2. Evolution and Natural Selection: history, mechanisms, examples, and some common misunderstandings Reading: Textbook chapters 3 and 4
15	3. Evolution of Mammals and Primates: history, defining characteristics and current diversity Reading: Textbook chapters 7 and 8
22	4. African Apes and Hominid Origins Reading: Textbook chapters 9 and 10
29	<i>Class cancelled</i> 5. (Date TBA) Field trip to the Hong Kong Zoological and Botanical Gardens Reading: Setchell, J., & Curtis, D. (Eds.). (2011). Field and Laboratory Methods in Primatology: A Practical Guide (2nd ed.). Cambridge: Cambridge University. Introduction (pp 1 – 20) and Chapter 18 (pp. 319 – 338)
Oct 6	6. Human Ancestors: the <i>Homo</i> genus Reading: Textbook chapter 11
13	7. Archaic <i>Homo</i> in Europe and beyond Reading: Watch film “Unknown: Cave of Bones” on Netflix – and write a short response paper (1 page)
20	8. Trends in Human Evolution: Part 1 Reading Textbook chapter 14 In-class assessment 1
27	9. Trends in Human Evolution: Part 2 Reading: Kaplan, H., Hill, K., Lancaster, J. and Hurtado, A.M. (2000), A theory of human life history evolution: Diet, intelligence, and longevity. <i>Evol. Anthropol.</i> , 9: 156-185. <a href="https://doi.org/10.1002/1520-6505(2000)9:4<156::AID-EVAN5>3.0.CO;2-7">https://doi.org/10.1002/1520-6505(2000)9:4<156::AID-EVAN5>3.0.CO;2-7
Nov 3	10. Major Technologies: Fire, Stone Tools, and Art Reading: Wrangham, R. (2009). <i>Catching fire: how cooking made us human</i> . Basic books. Chapters 4 and 5.
10	11. Latest Discoveries and Debates in Biological Anthropology

	Reading: • Callaway, E. (2023). Sharp criticism of controversial ancient-human claims tests eLife's revamped peer-review model. <i>Nature</i>, 620(7972), 13-14. • Wong, K. (2023). This Small-Brained Human Species May Have Buried Its Dead, Controlled Fire and Made Art.”. <i>Scientific American</i>, 5.
17	12. The Emergence of the Modern Human Reading: Textbook: Chapters 12 and 13
24	13. Human and Our Environments Today: What’s next for our species? Reading: • Richerson and Boyd (2005) Nothing about Culture Makes Sense Except in the Light of Evolution. In: <i>Not by Genes Alone</i>. Chicago: The University of Chicago Press. Pp. 237 – 257 • Jurmain, Kilgore, Trevathan (2013). Chapter 14. The Human Disconnection. In: <i>Essentials of Physical Anthropology</i> (Ninth Edition). Belmont: Wadsworth. Pp. 367 – 377. In-class assessment 2