# ANTH2810/UGEB2502 Human Evolution

<u>Term 1</u>

**Lecture time:** Mondays 10:30 – 12:15 (11/9 – 27/11) UCC-114

**Tutorial time:** TUT/01 Mondays 12:30 – 13:15 (11/9 – 27/11) UCC 114

TUT/02 TBA

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

TA:

**Office hours:** Mondays 13:00 – 14:00 NAH 322 (CC);

TBA

**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 1 hour 45 min lecture and one 45-min tutorial per week for one semester. Tutorial will take various forms, including a field trip to the Biodiversity Museum at the University of Hong Kong.

### Course assessment and polices:

The final grade for the course is based on:

1) Participation	10%	10%
2) Response papers x 2	10% x 2	20%
3) Field trip report	10%	10%
4) Group project	10%	10%
5) Midterm Exam	20%	20%
6) Final Exam	30%	30%

# Participation (10%)

Students are expected to attend all the lectures and tutorials. Class participation will be assessed by in-class discussion and response rates in uReply.

# *Reaction paper (10% x 2)*

Throughout the course, students will submit two reaction papers, each worth 10%. Students may choose any two of the weekly topics discussed in class. The reaction papers should be brief essays ( $\sim 1 - 2$  pages) in which the students are expected to outline, and reflect on, some of the ideas that they think are important, or useful about that week's readings.

#### Field trip report (10%)

Students will write a 2-3 pages report on the field trip. More direction will be provided in class and during the field trip.

## Group project (15%)

During the second or third tutorial, students will be asked to form small groups of no more than three people per group. Each group may pick a hominin species to focus on (there will be discussion so that no two group will present on the same species). Students are expected to conduct research on each of their chosen species, describe major findings of, and/or debates surrounding the species. Each group will present their research during the last two or three weeks of the semester ( $\sim 15$  mins).

### Midterm and final exams (20 + 30%)

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

### 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.

Grade	Overall course
А	Outstanding performance on all learning outcomes.
В	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.
С	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.

#### **Grade descriptors**

Week	Date	Lecture Topic	Readings
1	Sept 4	No class – orientation day	Watch film: "Unknown: Cave of Bones" on Netflix
2	11	Introduction: Orientation and Course Overview	Textbook: Chapters 1 and 2
3	18	Evolution and Natural Selection: history, mechanisms, examples, and some common misunderstandings	Textbook: Chapters 3 and 4
4	25	Evolution of Mammals and Primates: history, defining characteristics and current diversity	Textbook: Chapter 7
5	Oct 1	National Day of PRC (no class)Reschedule class (date TBA):Characteristics of Living Primates	Textbook: Chapter 8
6	9	African Apes and Hominid Origins	Textbook: Chapter 9
7	16	Human Ancestors	Textbook: Chapter 10
8	23	Double Ninth FestivalField trip (date TBA) to BiodiversityMuseum at the University of Hong Kong	Textbook: Chapter 5
9	30	The Emergence of Modern Humans	Textbook: Chapters 11 and 12
10	Nov 6	Human Adaptability to Local Conditions	Textbook: Chapter 13
11	13	Anatomically modern humans: brain, behaviours, and subsistence	Textbook: Chapter 14
12	20	Latest Discoveries and Debates in Biological Anthropology	Bermúdez de Castro, J. M., & Martinón-Torres, M. (2022). The origin of the Homo sapiens lineage: When and where? Quaternary International, 634, 1-13. doi:https://doi.org/10.1016/j.quaint.2 022.08.001
13	27	Human and Our Environments Today: What's next for our species?	Richerson and Boyd (2005) Nothing about Culture Makes Sense Except in the Light of Evolution. In: Not by Genes Alone. Chicago: The University of Chicago Press. Pp. 237 – 257 Jurmain, Kilgore, Trevathan (2013). Chapter 14. The Human Disconnection. In: Essentials of Physical Anthropology (Ninth

# Weekly schedule (this syllabus is subject to change)

		Edition). Belmont: Wadsworth. Pp. 367 – 377.
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# **Topics for tutorials:**

- Week 1: No class orientation day
- Week 2: General introduction
- Week 3:
- Week 4:
- Week 5: National Day of PRC- Reschedule tutorial (date TBA)
- Week 6:
- Week 7: Mid-term exam
- Week 8: Double Ninth Festival Field trip this week (date TBA)
- Week 9:
- Week 10:
- Week 11: Group presentation
- Week 12: Group presentation
- Week 13: Overview of the course