Standard Course Syllabus (updated Fall, 2016)

**ARCH 131-3 HUMAN ORIGINS**

Calendar Description: A non-technical survey of the evolutionary process, the primate background of humans, fossil humans, and the associated evidence of cultural development. An introduction to physical/biological anthropology. Breadth-Social Sciences/Science.

Example Course Outline Description[[1]](#footnote-1): This course provides an introduction to the genetic, morphological, and behavioural evidence for human evolution, as well as to the ways in which this evidence is analysed and interpreted with the framework of Darwinian theory. This includes: an examination of evolutionary theory and the basics of the genetics underlying the evolutionary process; the place of humans in the animal kingdom with a focus on the order Primata; a detailed look at the hominin fossil record as it illustrates the emergence of the major fossil lineages leading to modern humans; and an examination of modern human variability.

The following topics must be covered:

* The history of the development of the sciences leading to research into human evolution
* The nature of physical/biological anthropology and its sub-disciplines
* The history and principles of evolutionary theory, including:
* Sources of genetic variability at the cellular level
* Evolutionary mechanisms: natural selection, sexual selection, genetic drift, etc.
* The position of primates in the tree of life and hominins within the primate clade
* An overview of the anatomy and biology of living primates, especially the great apes
* The hominin phylogenetic tree as reflected by the current fossil record including an examination of the major fossil genera representing the human side of the ape-human split.
* The emergence of the genus *Homo* and the major species members of this clade:

*erectus/ergaster, heidelbergensis, neanderthalensis, sapiens*

* The role of ancient and modern DNA in understanding hominin evolution and emergence of humans
* The material culture and technological developments associated with human evolution and the concepts of Dual Inheritance Theory and Biocultural Evolution
* Contemporary human diversity and adaptation

Suggested Inclusions:

* Methods of dating fossils and artifacts
* An overview of the scientific method

Possible Textbooks:

* Stanford, Allen and Anton. 2016. *Exploring Biological Anthropology*. Pearson. 9780205907335 (currently used by the department)
* Steckley, John. *Introduction to Physical Anthropology*. Oxford Canada. 0195432150
* Jurmain, Kilgore, and Trevathan. 2013. *Essentials of Physical Anthropology*. 9th edition. Wadsworth Cengage. 9781111411770
* Keenleyside and Lazenby. A Human Voyage: Exploring Biological Anthropology. 2014. Nelson College Indigenous; 2nd edition.

1. Course coverage and materials are at the discretion of the instructor, but major changes in ARCH 131 course content should be approved by Archaeology Department Chair well in advance of the first day of classes. [↑](#footnote-ref-1)