

Paper B1: Humans in Biological Perspective

2019-2020



Anthropology is the study of humans in comparative perspective – comparing societies and cultures, looking at change over time, and exploring human biological diversity.

Biological Anthropology takes this comparative approach to exploring human evolution and adaptation: comparisons between humans and other animals to understand human uniqueness and biological variation; comparisons across time to unravel the evolutionary history of hominins over the last 6–8 million years; investigating variation in human development and health, exploring the mechanisms that generate population differences today and in the past; and looking at individual behaviour in terms of evolution and adaptation and its underlying cognitive basis.

Paper Coordinator: Dr Emma Pomeroy (eep23@cam.ac.uk)

Lecturers: Professor Marta Mirazón Lahr, Professor Robert Foley, Dr Guy Jacobs, Dr Emma Pomeroy, Dr Nikhil Chaudhary, Dr Rihlat Said Mohamed, Dr Enrico Crema

Paper aims and objectives:

This paper provides a broad introduction to Biological Anthropology and covers major subject areas such as primate biology and behaviour, human evolution, human health, adaptation to different environments and life history theory. Through studying this course, students will gain a strong foundation in the field of Biological Anthropology, the processes and patterns of evolution, the way humans fit into the overall pattern of biodiversity, the way in which humans reproduce and grow in an ecological and social environment, and the challenges of living in different environments. Focus is on both the past and how we became human, and the present, with the biological challenges, such as health and disease, humans face today.

The course is designed both for those who wish to specialise in Biological Anthropology, and those who can use it as a complementary and contextual field of study for Archaeology, Psychology and Human, Social and Political Sciences. The course provides an understanding of how different approaches can be used to address specific questions about human origins and diversity, as well as serving as a way of exploring the interaction between biological and social or cultural factors in being human.

Learning outcomes:

On successful completion of this paper, students will produce high-quality essays demonstrating a firm grounding in the fundamental theories and principles of Biological Anthropology, supported by a range of relevant examples drawn from different cultures, populations, time periods and species (including the non-human primates), and a critical approach to key theories and evidence.

Assessment:

This paper is assessed by a three-hour written examination. All topics are covered in a single undivided paper, and candidates must answer three questions from a choice of ten.

Supplementary teaching:

Students will have supervisions arranged by their Director of Studies. Three supervisions per term are usual, with an essay typically expected for each supervision.

Course structure:

The course is divided into four sections; the first will provide an introduction to the world of primates, and how their evolution and diversity throws light on evolutionary processes and how humans are part of the natural world; the second focuses on human evolution, and examines the fossil, genetic and behavioural evidence for the history of the human lineage,

and how we became human. The third provides an introduction to the field of genetics, introducing the basic principles and how modern genetics is revealing patterns and processes of human diversity and adaptation; the fourth module is concerned with the biology, ecology and behaviour of contemporary populations, and explores how humans adapt to multiple environments, the interaction of nature and nurture, growth and development and the factors that influence health. It also looks at how behavioural ecology can be applied to humans. In the Easter Term there will be an opportunity to learn about cultural evolution, and a revision lecture.

Lecture Schedule:

Lectures take place Tuesdays 9-10 am and Wednesday 11 am - 12 midday in the Henry Wellcome Building Seminar Room, Fitzwilliam Street ([map](#)).

Michaelmas Term <i>16 lectures</i>	Week 1: Introduction to the course Weeks 1-4: Primate evolution, biology and behaviour Weeks 5-8: Human Evolution	Dr Emma Pomeroy Professor Marta Mirazón Lahr Professor Robert Foley
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Lent Term <i>16 lectures</i>	Weeks 1-2: Introduction to Human Genetics Weeks 3-4: Adaptation to the Environment Weeks 5-6: Human Behavioural Ecology Weeks 7-8: TBC	Dr Guy Jacobs Dr Emma Pomeroy Dr Nikhil Chaudhary Dr Rihlat Said Mohamed
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Easter Term <i>5 lectures</i>	Weeks 3-4: Cultural Evolution TBC: Revision Lecture	Professor Robert Foley and Dr Enrico Crema Dr Emma Pomeroy
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Note: Contents may be subject to change. Please always refer to the on-line version of this syllabus on Moodle for the most up-to-date information.

Recommended Readings:

- Boyd, R. & Silk, J. (2018) *How Humans Evolved*. 8th Ed. W. W. Norton & Co.
- Campbell C. J. et al. (eds). (2010) *Primates in Perspective*. 2nd Ed. Oxford University Press.
- Dawkins, R. (1989) *The Selfish Gene*. New Ed. Oxford University Press.
- Fleagle, J. (2013) *Primate Adaptation and Evolution*. 3rd Ed. Academic Press.
- Ridley, M. (2003) *Nature Via Nurture: Genes, Experience, and What Makes Us Human*. Harper Collins.
- Stringer, C. & Andrews, P. (2011) *The Complete World of Human Evolution*. 2nd Ed. Thames & Hudson.
- de Waal, F. (2001) *Tree of Origin. What Primate Behavior Can Tell Us about Human Social Evolution*. Harvard University Press.

Specific reading for each part of the course will be provided by the lecturer.

All students are welcome to use the Haddon Library, which is located on the first floor of the North Building, Downing Site ([map](#)). Additional copies of books may be available in other Cambridge libraries, including the University Library (UL) and your own college libraries.

Please note that, for some titles, multiple editions may be available (in general, go for newer editions where you can, as they are more up to date).

If you require assistance locating books, journal articles or other resources, please speak with your supervisor or a librarian at the Haddon Library, UL or your college library.