



## Becoming Human: The Science of Us

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<b>What will you learn from this Elective?</b>	<p>What does it mean to be human? How are we related to the rest of the animal kingdom? If all species have a set of defining characters, which ones make our species distinct and can we determine how, when and why we acquired them?</p> <p>In this module we explore the extent to which 21st century science can address the big questions about what we are and where we came from. We explain how fragmentary clues to our past can be recovered from bones, stones and genes. We look at the challenges and rewards of combining data from multiple disciplines to produce unique insights into our journey from tropical forest ape to global, planet-altering species. Along the way, we will encounter hobbits, discover lost landscapes, reconstruct Neanderthals and even find the traces of ghost populations hidden in our genomes. We see how new techniques and surprise discoveries have challenged established theories, forcing fundamental revisions to the human story. And we illustrate why an accurate understanding of our past has profound implications for our lives today, spanning diverse topics from human diet, health and disease through to migration, 'race', language and national identity.</p>
<b>Student Workload</b>	<ul style="list-style-type: none"><li>• Face-to-face lectures and workshops/discussion sessions (30 hrs)</li><li>• Self-paced, on-line instructional material (e.g. webcasts), associated activities and assessment (40 hrs)</li><li>• Collaborative project work to produce and present an educational resource (poster) explaining a chosen aspect of human evolution and its significance for modern day life (30 hrs)</li></ul>
<b>Assessment Components</b>	<ol style="list-style-type: none"><li>1. Online quizzes deployed via Blackboard throughout the module linked to the activities or assessing basic understanding of core concepts (50%).</li><li>2. A group project mark based on the production and presentation of an educational resource (poster) explaining a chosen aspect of human evolution and its significance for modern day life (30%)</li><li>3. An individual mark linked to the project work comprising: a short personal reflection on their contribution to the group work; and peer assessment of the poster presentation of another group (20%).</li></ol>
<b>Indicative Reading List</b>	<p>Langdon, J.H. (2016) <i>The Science of Human Evolution. Getting it Right.</i> Springer.</p> <p>Relethford, J.H., Bolnick, D.A. (2018) <i>Reflections of our Past. How human history is revealed in our genes.</i> 2nd Edition. Routledge.</p>

	Stringer, C., Andrews, P. (2011) The complete world of human evolution. Thames & Hudson.
<b>Learning Outcomes</b>	On successful completion of this module, students should be able to: <ol style="list-style-type: none"><li>1. Describe the principal physical and behavioural transformations that occurred in the hominin lineage and their significance for modern humans;</li><li>2. Evaluate the kinds of data employed in palaeoanthropology and the inferences that can be drawn from them;</li><li>3. Illustrate how a multidisciplinary approach has provided novel insights into human evolution with particular reference to the 21st Century 'DNA Revolution';</li><li>4. Explain the relevance of palaeoanthropology to current research themes including 'Genes &amp; Society' and 'International Integration'.</li><li>5. Reflect on material through independent study / self-assessment, and collaborate with peers on assessed group project work.</li></ol>