Chronology, Diet and Identity

Module Code: ARC6023-B
Academic Year: 2018-19
Credit Rating: 20
School: School of Archaeological and Forensic Sciences
Subject Area: Archaeology
FHEQ Level: FHEQ Level 6
Module Leader: Dr Catherine Batt

Additional Tutors:
Dr Hannah Koon, Dr Julia Beaumont, Dr Valerie Steele

Pre-requisites:
Co-requisites:

Contact Hours

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Lectures</td>
<td>24</td>
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<tr>
<td>Tutorials</td>
<td>12</td>
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<tr>
<td>Directed Study</td>
<td>164</td>
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Availability Periods

<table>
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<tr>
<th>Occurrence</th>
<th>Location/Period</th>
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<tr>
<td>BDA</td>
<td>University of Bradford / Semester 2 (Feb - May)</td>
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Module Aims

To explore the role of scientific methods in addressing three key areas of study of the past: identity, diet and chronology. What has been achieved? How do we evaluate the archaeological importance of the findings? What challenges remain and how might they be addressed?

Particular emphasis will be placed on the applications of techniques and the inherent
challenges in placing interpretation into a wider understanding of people in the past. There is an emphasis on specific themes and the use of case studies based on recently published research.

Outline Syllabus

The module will introduce, through case studies & the development of specific themes, a range of techniques & approaches used in archaeology to address questions of identity, diet and chronology. It will also cover the lessons learned from previous studies & future potential.

The identity theme will cover the place of molecular investigation in defining identity, residence & migration; source, stability & transformation of molecules; ancient DNA: What survives? How does it survive? What does it tell us about people in the past? The danger of contamination & the importance of sampling strategies; Biogeochemical studies & their use in identifying migration.

The diet theme will examine chemistry of lipids & proteins & their application in identifying past use of food; pottery vessel function; stable light isotopes & trace elements as indicators of diet.

The chronology theme will cover an introduction to chronology & issues of precision and accuracy, radioactive dating methods (radiocarbon dating, KAr and Uranium series), archaeomagnetic dating, luminescence methods (TL and OSL), geochronological methods (tephrochronology, ice cores, magnetic reversals), dendrochronology, & newly developed methods.

Module Learning Outcomes

On successful completion of this module, students will be able to...

1. Critically review the contribution that scientific methods make to the study of identity, diet and chronology in the past.

2. Synthesise the theoretical and methodological framework for evaluation of the contribution of isotopic, molecular and scientific dating studies of archaeological materials.

3. Apply enhanced analytical and problem-solving skills to the evaluation and synthesis of recently published research.

Learning, Teaching and Assessment Strategy

Lectures will be used to introduce key principles and case studies will be developed in seminar/workshops which will include group discussion and primary data evaluation. The emphasis on evaluating current research will be demonstrated by the assessment, which will comprise three critical reviews of recently published research (the supplementary assessment will address the same issues through an extended essay format). During Directed Study hours students are expected to undertake reading to consolidate and expand on the content of formal taught sessions; research and prepare for assessments; revise material from formal taught sessions; and undertake specific elements of reading as
directed.

**Mode of Assessment**

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<th>Type</th>
<th>Method</th>
<th>Description</th>
<th>Length</th>
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<td>Supplementary assessment -</td>
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**Legacy Code (if applicable)**

**Reading List**

To view Reading List, please go to [rebus:list](#).