ARCHON courses Geoarchaeology 2018-2019

Teachers: Professor Ian A. Simpson, (i.a.simpson@stirling.ac.uk)
Dr. Sjoerd J. Kluiving (s.j.kluiving@vu.nl)

25-26 March 2019, location Vrije Universiteit Amsterdam, Monday room MF-A415 (Medical Building),
Tuesday HG-OG30 (Main Building).

Reading Soils and Sediments: Global Geoarchaeology (2 days), 2 ects

<table>
<thead>
<tr>
<th>Monday 25 March room MF-A415 (Medical Building)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.00 Introduction</td>
</tr>
<tr>
<td>Session 1: Seminars, reading global soils and sediments</td>
</tr>
<tr>
<td>Session 2: Geoarchaeology field examples I</td>
</tr>
<tr>
<td>Session 3: Guided preparation of student presentations, 17.00 end</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tuesday 26 March room HG-OG30 (Main Building)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.00 Session 4: Geoarchaeology field examples II</td>
</tr>
<tr>
<td>Session 5: Guided preparation of student presentations, mini-presentations of teachers</td>
</tr>
<tr>
<td>Session 6: Student presentations on research projects with a geoarchaeological focus, 17.00 end.</td>
</tr>
</tbody>
</table>

Assignment: To build a presentation relating archaeological research problem to geoarchaeology methods

Assessment: 50% presentation, 50% final exam

Introduction:
Geoarchaeology is a growing and evolving research discipline at the intersection between geomorphology, environmental history and archaeology (Butzer, 2008). Geoarchaeology as a research field continues to grow as analyses and techniques more typically used in earth and environmental sciences are shown to have use in interpreting the archaeological record (Diskin et al, 2013). According to Engel & Brückner (2014) geoarchaeology is ‘the science that studies geo-bio-archives in an archaeological context by also considering historical and archaeological data sources in its syntheses’, and they emphasize its multidisciplinary role, as a sub discipline of geomorphology, between the geosciences and cultural sciences. Geoarchaeology provides important new insights into landscape reconstruction, human behaviour, and cultural processes that are a backdrop to landscape change (Kluiving et al, 2015).

Objectives:

This course gives theoretical frameworks for interpreting soils, sediments and landscapes as records of the past and provides theoretical training in field and laboratory methods that identify, quantify and evaluate early human activities and environmental imprints. These understandings and skills contribute new landscape histories for Mediterranean and Middle-East regions. This work offers important and challenging perspectives on how people lived with and adapted to environmental change and has resonance with contemporary debates on sustainability, resilience and heritage management.

Learning outcomes:

• Understanding the principles of interpreting landscapes and sediment stratigraphies as records of the past.

• Understanding the contributions of landscape studies and sediment analyses in the interpretation of key aspects of landscape history including site formation processes, early arable land management practices, water management and human niche construction.

• Ability to integrate landscape histories and sedimentary evidence with inter-disciplinary sources, including documentary, archaeological and environmental information, to address broader issues of society – environment change interactions.

• The module provides a foundation for research-based field and laboratory Dissertation topics in geoarchaeology and landscape history.

Acquired skills:

• Competence in the application of science based methods to answer archaeological research questions.

• Competence in the description, analyses and interpretation of soils and sediments from archaeological contexts.

• Competence in cross-disciplinary approaches applied to questions of society-environment interactions.

Research – led elements:
The 2-day module is entirely research led, with each lecture based on a series of research papers and referred to a live, current, research project. The module also leads directly into research dissertation topics with the opportunity to present your own research area in a geoarchaeological context.

**Seminar programme:**

Files with the seminar presentations as well as the reading lists and other materials will be available beforehand.

**Monday 25 March, room MF-A415 (Medical Building)**
9.00-9.30 hours: Opening; welcome, instructions
**Contexts**
9.30-12.00 session 1 – Soil/ sediment stratigraphies in geoarchaeological and landscape history contexts.
12.00-13.00 hours: lunch break
**Geoarchaeologies of all regions**
13.00-1500 hours: session 2 – NW European and Mediterranean geoarchaeology
15.00-17.00 hours: session 3 – Guided preparation of student presentations I

**Tuesday 26 March, room HG-0G30 (Main Building)**
**Geoarchaeologies of all regions**
9.00-10.30 hours: session 4 – Middle Eastern and American geoarchaeology
10.30-12.00 hours: session 5 – Guided preparation of student presentations II
12.00-13.00 hours: lunch break
13.00-17.00 hours: session 5 – Student presentations of 15 minutes each.
17.00-19.00 hours Final Exam

**Assessment:**

50% examination (2 questions; 2 hours, 25% each) / 50% presentation. Students are encouraged to use their own research and dissertation projects. The minimum grade to obtain a pass for a module is a 60% score

**Admission, logistics**

Students can administer for this course by contacting the ARCHON office at secretary@archonline.nl.
Any questions relating to the content of the course can be sent to Sjoerd Kluiving, s.j.kluiving@vu.nl.
The course will finish with a final exam to be completed in the course. The location of the course is in room MF-A415 (4th floor of Medical Building) on Monday and in room HG-0G30 (ground floor Main Building at the VU University Amsterdam, De Boelelaan 1079-1085, 1081 HV Amsterdam, see for route and travel descriptions http://www.vu.nl/en/about-vu-amsterdam/contact-info-and-route/route-description/index.asp
Reading:

Reading for this unit is found as general texts on geoarchaeology and environmental history giving context to the module, and as research papers. It is strongly recommended that the references are read prior to the lecture / seminar session as a foundation for discussion.

1. Soils, sediments and environmental history


2. Geoarchaeology, general


3. Mediterranean Geoarchaeology


4. Middle Eastern Geoarchaeology

a) Neolithic Urbanisation - Iran


b) Greco-Roman-Byzantine urban transitions – Jerash Jordan


5. American Geoarchaeology

a) Community resiliences: lessons from the past.


b) Landscape evolution, humans and change in domestication speeds and styles


Murphy L.R., Hurst S.C., Holliday, V.T., Johnson, E. 2014. Late Quaternary landscape evolution, soil stratigraphy, and geoarchaeology of the Caprock Canyonlands, Northwest Texas, USA Quaternary International 342 (2014) 57e72