



Exchange programme Vrije Universiteit Amsterdam

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit Amsterdam - 2024-2025

Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please [visit the exchange programmes webpages](#).

Science in Archaeology 2

Course Code	L_BABAARC006
Credits	6
Period	P2
Course Level	300
Language Of Tuition	English
Faculty	Faculty of Humanities
Course Coordinator	dr. S.J. Kluiving
Examiner	dr. S.J. Kluiving
Teaching Staff	dr. S.J. Kluiving, dr. L.M. Kootker, A. Koopman
Teaching method(s)	Seminar

Course Objective

After finishing this course, students will:

- have acquired an advanced knowledge and understanding of a specified range of science-based methods and techniques used in archaeology
- have acquired advanced knowledge of science methods and techniques that are used to answer archaeological research questions;
- be able to critically reflect on the potential and limitations of these methods (application, added value, representativeness);
- have gained an advanced understanding of the position of science in archaeology;
- have gained practical skills in applying a number of science methods and techniques, in particular in the fields of palaeo-ecology, palaeo-climatology, isotope archaeology and geoarchaeology;
- have learned to analyse datasets obtained using science methods and techniques.

Course Content

Science in Archaeology 2 contains a continued introduction and practical application of scientific methods that can be used in archaeological research. Each student in Archaeology encounters problems and specific questions in the field or in the laboratory that relate to the age and prospection of the site, the floral signature of the surrounding landscape, palaeoclimatological data, as well as the formation and preservation potential of the archaeological assemblage. In this course an introduction and basic instruction into the variable methodology of Science in Archaeology is presented by several specialists in this field.

Contents:

1. Palaeoecology

What are indicators of human influence in the floral palaeoecological record? Insights into how information about ecology, and ecological change, in the past can be obtained. To understand the ecology of the past we will also explore mechanisms related to past climatic change, physical processes in the landscape, and human activity.

2. Geoarchaeology

Geoarchaeological studies and the use of geomorphology as a tool for palaeo-climatic reconstruction. Introducing basic concepts and methods of the earth sciences used to study the (local) sedimentary context of the archaeological record. How can the geomorphological context of archaeological landscapes be used for inferring on palaeo-climatic changes? These understandings and skills contribute to new landscape reconstructions at different scales, to be used for inferring on past human-landscape-environment interactions and past human behavior.

3. Isotope Archaeology

The Third Science Revolution started with the gradual implementation of isotope geochemistry and aDNA in archaeological research. This module focusses specifically on the application of the strontium and oxygen isotope system in archaeological contexts. Which questions with regards to palaeomobility can and -more importantly- cannot be answered within the realms of archaeology through isotope research.

Additional Information Teaching Methods

Lectures and practical exercises that are compulsory.

Method of Assessment

Assessment consists of practical assignments, essays and/or presentations for each of the themes treated. Together, these will count for 60% of the grade (3x20%). The remaining 40% of the grade will be assigned through a written final exam.

The resit regulations will be specified in the study manual.

Entry Requirements

Environmental Archaeology, Digital Archaeology, Science and Archaeology. For students that do not have this prerequisites it is expected that they internalise the missed knowledge.

Literature

- Roberts, N. 2014. The Holocene, An Environmental History, 3rd Edition. Wiley-Blackwell.
- Additional literature and web resources will be provided through Canvas.

Additional Information Target Audience

Target Audience:

- Students of the minor Archaeology Today
- Students of Saxion University of Applied Sciences who follow the preparatory minor ('doorstroomminor') Archaeology
- BA3 Students in Archaeology who wish to take the course as elective
- Also available as elective to students in History, Ancient Studies, Earth Sciences, Earth, Economy and Sustainability, and exchange students

Recommended background knowledge

Environmental Archaeology, Digital Archaeology, Science and Archaeology