

Introduction to the Natural Sciences in Archaeology (A003307)

Course size *(nominal values; actual values may depend on programme)*

Credits 6.0

Study time 180 h

Course offerings and teaching methods in academic year 2025-2026

A (semester 2)

Dutch

Gent

lecture

independent work

Lecturers in academic year 2025-2026

Massagé, Liesbeth

LW02

staff member

Vandenabeele, Peter

LW02

lecturer-in-charge

Deforce, Koen

LW02

co-lecturer

De Grootte, Isabelle

LW02

co-lecturer

Offered in the following programmes in 2025-2026

[Bachelor of Arts in Archaeology](#)

6

A

[Preparatory Course Master of Arts in Archaeology](#)

6

A

[Elective Set Archaeology](#)

6

A

Teaching languages

Dutch

Keywords

Natural sciences, archaeology, archaeometry

Position of the course

This course is part of the package 'methodology'.

This course wants to help the students to gain insight in the methods and interpretation of natural scientific research in archaeology.

Contents

This course covers the first principles on sampling of archaeological material for natural scientific research, and the possibilities offered by soil sciences, geology and geography for archaeology, archaeozoology, archaeobotany, physical anthropology, etc. Moreover, an overview is given of the most important analytical methods.

Initial competences

No specific preliminary knowledge or skills are required.

Final competences

- 1 To have an overview of the methodology of natural scientific research in archaeology.
- 2 To be able to evaluate natural scientific reports in an archaeological research project.
- 3 To be able to follow the archaeological literature on natural scientific research.
- 4 To be aware of the potential of natural scientific research in archaeology.
- 5 To have an ecological impression on human history.

Conditions for credit contract

Access to this course unit via a credit contract is unrestricted: the student takes into consideration the conditions mentioned in 'Starting Competences'

Conditions for exam contract

Access to this course unit via an exam contract is unrestricted

Teaching methods

Lecture, Independent work

Extra information on the teaching methods

Lecture: Where students should take additional notes to the notes in the manual as well as to the provided study materials.

Guided self-study: the students should be able to process some texts on a self-reliant base

Excursion: the teacher can eventually organise a national excursion/lab visit.

This course unit assumes responsible use of generative artificial intelligence (GAI).

Unpublished data should never be entered into GAI tools. The applicable guidelines from Academic Skills are respected throughout the course.

Study material

Type: Handbook

Name: Natuurwetenschappen en archeologie : methode en interpretatie, Anton ErvynckVeerle LinseelePeter

VandenabeeleGert VerstraetenPatrick Degryse, Acco

Indicative price: € 40

Optional: no

Type: Slides

Name: course slides

Indicative price: Free or paid by faculty

Optional: no

References

A list is available in the manual.

Course content-related study coaching

Individual coaching is possible after the courses, via Ufora or after making an e-mail appointment with the teaching staff

Assessment moments

end-of-term assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment

Examination methods in case of periodic assessment during the second examination period

Written assessment

Examination methods in case of permanent assessment

Possibilities of retake in case of permanent assessment

not applicable

Extra information on the examination methods

Part Ecological archaeology: open questions

Part Analytical methods:

- Terminology: explain in max. 5 lines.

- Statements: Agree or disagree

Calculation of the examination mark

End-of-term evaluation: 50 % of the marks are on the part ecological archaeology,

50% of the marks are on analytical methods.