



DEATH IN THE LATE MEDIEVAL PERIOD: THE LAGARES NECROPOLIS BIOARCHAEOLOGY LABORATORY PROJECT, LISBON (PORTUGAL)

Course ID: ARCH 365BF

June 28th - July 25th, 2026

Academic Credits: 8 Semester Credit Units

FIELD SCHOOL DIRECTOR(S)

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OVERVIEW

Archaeological excavation within historic cities often reveals deep stratigraphy dating back to the original foundations, illustrating the city's history. Following construction works at 74 Rua dos Lagares, in the heart of Old Lisbon, rescue archaeological excavations exposed an area with multiple, well-preserved burials dating to the 11th–15th centuries CE (Medieval/Modern period). This area served as a necropolis during two distinct periods: Necropolis I, was the Jewish burial site that was vandalized in 1497, and Necropolis II, functioning as a Muslim and Christian cemetery used in the late 15th century CE. Additionally, between 2023 and 2024, another significant archaeological excavation was conducted a few meters down the same road by Era Arqueologia, uncovering an important area of the muslim necropolis (Necropolis III), used after the conquest of Lisbon by the Christian kings in 1147.

Due to the significance of this site and the large collection of human remains, further research was deemed necessary to gain a better understanding of the demographic, biological, morphological, and paleopathological profiles of these populations, as well as the varied funerary practices in Lisbon. To achieve this, a research project has been established and presented to the Portuguese cultural authorities to address the various research questions posed by the exhumation of these nearly 500 individuals

This newly initiated research project has been approved for the site, aiming to investigate the medieval necropolises discovered in Mouraria, encompassing areas such as Rua dos Lagares, Largo das Olarias, Travessa do Jordão, Calçada do Monte, and potentially other adjacent spaces. This project seeks to explore the biological, cultural, and social diversity of historical communities during significant sociopolitical changes.

The research approach integrates bioanthropology, archaeology, history, and laboratory sciences to achieve a comprehensive understanding of the buried populations and their historical context. Specific objectives include:

- Detailed Osteological Analysis: Conducting a thorough examination of skeletal remains to reconstruct profiles, including age, sex, stature, and health conditions.
- Paleodietary Studies: Utilizing isotopic analyses to understand dietary habits and the influence of cultural and religious practices on the populations.
- Mobility Studies: Analyzing isotopic data to investigate migratory patterns, enhancing our understanding of population dynamics in medieval Lisbon.
- Pathological Assessments: Identifying health conditions in the skeletons, focusing on various diseases, stress markers, and overall quality of life.
- Funerary Material Studies: Examining artifacts associated with funerary practices, including jewelry and religious objects, to gain insights into cultural meanings and functions.
- Radiocarbon Dating: Establishing a precise chronology for the burials, correlating dates with significant historical events to contextualize the findings.

- **Spatial Analysis:** Employing digital tools for mapping and analysis to understand burial organization and the reuse of funerary spaces.
- **Dignification of Human Remains:** Emphasizing the dignity of the excavated human remains, acknowledging the humanity of individuals from marginalized communities and honoring their contributions to history.

Looking ahead, the 2026 field school edition will continue to pursue the complete anthropological study of individuals from these various necropolises, with a Minimum Number of Individuals (MNI) exceeding 500 in total. This edition aims to build upon the findings of the previous years and further enhance our understanding of the diverse biological and cultural landscape of medieval Lisbon, while promoting reflection on themes such as diversity, coexistence, and social inclusion

ACADEMIC CREDIT UNITS & TRANSCRIPTS

Credit Units: Attending students will be awarded 8 semester credit units through our academic partner, Connecticut College. Connecticut College is a highly ranked liberal arts institution with a deep commitment to undergraduate education. Students will receive a letter grade for attending this field school (see assessment, below). Students are encouraged to discuss the transferability of credit units with faculty and registrars at their home institution prior to attending this field school.

Transcripts: An official copy of transcripts will be mailed to the permanent address listed by students on their online application. One more transcript may be sent to the student's home institution at no cost. Additional transcripts may be ordered at any time through the [National Student Clearinghouse](#).

PREREQUISITES

There are no prerequisites for participation in this field school, although prior knowledge of human anatomy will be an advantage. This field school involves hands-on, experiential learning and students will learn on-site how to work in a post-excavation laboratory analyzing human remains. Students must keep in mind that they will be dealing with fragile contexts, materials, and artifacts, and so a careful approach to every stage of lab work is required.

COURSE OBJECTIVES

This research project aims to comprehensively explore the necropolises discovered around Rua das Lagares in Lisbon. This archaeological site represents a unique opportunity to study the biological, cultural, and social diversity of historical communities during a period of significant transformation. The discoveries include three distinct necropolises: the first associated with Jews (Necropolis I, dating before at least the 11th century until late 15th century and comprising approximately 260 individuals), a second demonstrating space reutilization by Muslims (Necropolis II, 15th century, with around 60 individuals), and a third, recently discovered, containing the remains of over 200 individuals from a Christianized Islamic community in Lisbon (Necropolis III), from the 12th century onwards.

The project seeks to understand how these minority groups interacted with the city and society during the transition from the medieval to the modern period. To achieve this, it integrates methods from

bioanthropology, archaeology, history, and laboratory sciences, aiming for a holistic understanding of these populations and their historical context. A full archaeological and anthropological report was created and filed with Portuguese authorities. Because of the importance of this site and of the large human remains collection, further research is needed so we may better understand the demographical, biological, morphological and paleopathological profile of these populations and the way death was dealt with through different funerary practices at Lisbon. For this reason, an IFR field School took place in the summer of 2023. The research focused on documentation of funerary patterns, architectures, modes of deposition and the analysis of artifacts accompanying the dead: religious objects, personal ornaments and others.

The 2026 field will be the fourth edition and a further opportunity to investigate the human remains recovered from the Lagares site.

Results from this season will be combined with research done in past and future seasons and published in an edited volume. Students will be encouraged to continue research work on the collection and to take part in the publication efforts.

LEARNING OUTCOMES

At the end of this field school, students will acquire tools to perform an anthropological study of human remains focused on understanding population demographics and biological, morphological and paleopathological profiles.

Methods and Concepts students will become familiar with:

- Documentation and research techniques applied to human remains, cleaning and identifying of human bones combining archaeological context with forensic evidence.
- Understanding anatomy of the human skeleton
- Exploring taphonomic forces (site formation processes) and their impact on the preservation and representation of the archaeological record.
- Understanding and practicing bioanthropological profile assessments, including Minimum Number of Individuals, age of death, sex identification

Paleopathology:

- General characteristics of the large groups:
 - i.Oral Pathology
 - ii.Degenerative joint disease (articular and non-articular)
 - iii.Traumatic
 - iv.Infectious
 - v.Metabolic
 - vi.Endocrine
 - vii.Neoplastic
- Complementary Analyzes
- Dating, isotopic and chemical analysis, histology and DNA

ASSESSMENT

Evaluation questionnaire (5%): A questionnaire will be held at the end of Week 2 to assess student comprehension of the information provided during lectures, field trips and lab work.

Lab performance (40%): Students will be evaluated as they complete tasks in the lab. Those tasks include cleaning, labeling, photographing and full anthropological analysis based on the principles provided through lectures, reading as well as staff advising.

Lab Notebook (20%): Students are expected to complete a lab journal and present it for evaluation during their final week. Project staff will provide students with expectations for these workbook entries.

Attendance, participation, and demonstration of interest (35%): Students are required to participate in all field school activities and will present research results at the end of each week

COURSE SCHEDULE

All IFR field schools begin with a safety orientation. This orientation addresses local and program protocols concerning student behavior, appropriate attire, local practices and sensibilities that may be unfamiliar, potential fauna and flora hazards, IFR harassment and discrimination policies, and the student Code of Conduct.

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Work days will start at 9 am and finish around 5 pm. There will be a morning and afternoon 15-minute break and a one-hour lunch break.

Week 1: During this first week, students will receive theoretical training as well as their first hands-on engagement with the collection.

June 28, 2026

Arrival in Lisbon

June 29, 2026

Morning: Introduction and presentation of project directors and contents of the field school, covering of IFR policies, distribution of Reception Kit and working materials, visit to ERA's installations where the course will take place.

Afternoon: The scientific directors of the archaeological excavation at Lagares will present the site. Project director Marina Lourenço will present the general anthropological methodology used at the Lagares project.

June 30, 2026

Morning: Biological anthropology and Taphonomy

Afternoon: Practical work with human remains (cleaning and labelling; applying acquired knowledge).

July 1, 2026

Tour in Medieval Lisbon guided by one of ERA's archaeologists.

July 2, 2026

Morning: Funerary anthropology; Biological Profile Assessment

Afternoon: Practical work with human remains (cleaning and labelling; applying acquired knowledge)

July 3, 2026

Morning: Morphology and paleopathology.

Weeks 2-4: The following weeks will be dedicated to the thorough and complete anthropological study of the necropolis II from the Lagares site.

Field trips and conferences with invited specialists will take place every week.

July 1, 2026: Visit to Medieval Lisbon guided by Lucy Shaw Evangelista

July 8 2026: Visit to Hercules Laboratory, Évora. The visit's goal is to present students with the varied ways analytical techniques are used for the recovery of molecular data and its application to the understanding of population movement and diet.

July 15, 2026: Visit to CAL (Lisbon Archaeology Centre) where the artifacts recovered at Lagares are stored.

July 22, 2026: Visit to the Department of Life Sciences, University of Coimbra, to observe the Identified Skeletons Collection.

July 25, 2026

REQUIRED READINGS

PDF files of all mandatory readings will be provided to enrolled students via a shared Dropbox folder. Students are encouraged to download and/or print readings prior to traveling. Course participants are expected to be prepared to engage the discussions led by facilitators, all of whom will be looking for compelling evidence that students have read and thought about the assigned readings prior to the scheduled day on which they are first discussed.

Buikstra, J.; Ubelaker, D. 1994. "Standards for data collection from Human Skeletal Remains". *Arkansas Archeological Survey Research Series Number 44*. Fayetteville: Arkansas Archaeological Survey. Chapter 1 (Pages 1-12)

White, T. 2000. *Human Osteology*. 2nd edition. San Diego: Academic Press. Chapters 1 and 2

RECOMMENDED READINGS

Lambert, P.M. and Walker, P.L. 2019. Bioarchaeology Ethics. In *Biological Anthropology of the Human Skeleton*. Katzenberg M.A. and A.L. Grauer, editors). Hoboken: John Wiley & Sons, Inc. Pages 1-46

Stodder, A.L. 2019. Taphonomy and the Nature of Archaeological Assemblages. In *Biological Anthropology of the Human Skeleton* (Katzenberg M.A. and A.L. Grauer, editors). Hoboken: John Wiley & Sons, Inc. Pages 71-114.

- O'Donnabhain B., Lozada M.C. 2018. Contested Bones: Archaeological Human Remains and Legacies of Power. In *Archaeological Human Remains: Global Perspectives*. O'Donnabhain B., Lozada M. editors). Cham: Springer. Pages 1-6
- Santos A.L. 2018. Skulls and Skeletons from Documented, Overseas and Archaeological Excavations: Portuguese Trajectories. In *Archaeological Human Remains: Global Perspectives*. O'Donnabhain B., Lozada M. editors). Cham: Springer. Pages 111-125.
- Erickson, G. 2013. "Stable Isotope Analysis of Humans." In *The Oxford Handbook of the Archaeology of Death and Burial*. Tarlow, S and N. Stutz, editor. Oxford: Oxford University Press. Pages 123-146.
- Petersen, A. 2013. "The Archaeology of Death and Burial in the Islamic World." In *The Oxford Handbook of the Archaeology of Death and Burial*. Tarlow, S and N. Stutz, editor. Oxford: Oxford University Press. Pages 241-258.
- O'Sullivan, D. 2013. "Burial of the Christian Dead in the Later Middle Ages." In *The Oxford Handbook of the Archaeology of Death and Burial*. Tarlow, S and N. Stutz, editor. Oxford: Oxford University Press. Pages 259-280.
- Sofaer, Joanna and Stig Sørensen. M. L.. 2013. "Death and Gender." In *The Oxford Handbook of the Archaeology of Death and Burial*. Tarlow, S and N. Stutz, editor. Oxford: Oxford University Press. Pages 527-542.
- Zimler. R. 1998. *The Last Kabbalist of Lisbon*. New York: The Overlook Press.