

Introduction to Digital Archaeology

CLST 362/562

ANTH 362/562

AAMW 562

NELC 562

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MW 3:30-5:00 PM
Museum 190

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Overview

Digital tools have permeated every aspect of archaeology, from data collection to publication, requiring that archaeologists become familiar with a broad range of computer-based methods and acquire new skill sets. Students in this course will be exposed to the broad spectrum of digital approaches in archaeology with an emphasis on fieldwork, through a survey of current literature and applied learning opportunities that focus on African American mortuary landscapes of greater Philadelphia. As an Academically Based Community Service (ABCS) course, we will work with stakeholders from cemetery companies, historic preservation advocacy groups, and members of the African Methodist Episcopal Church to collect data from three field sites. We will then use these data to reconstruct the original plans, untangle site taphonomy, and assess our results for each site. Our results will be examined within the broader constellation of threatened and lost African American burial grounds and our interpretations will be shared with community stakeholders using digital storytelling techniques. This course can count toward the minor in Digital Humanities, minor in Archaeological Science and the Graduate Certificate in Archaeological Science.

Students in this course will:

1. Digitize, manage and interpret historic maps and cemetery records in a geographic information system (GIS).
2. Develop digital field recording systems in consultation with cemetery stakeholders.
3. Conduct topographic and aerial surveys using Global Navigation Satellite Systems (GNSS) and Unmanned Aircraft Systems (UAS/UAVs).
4. Conduct a geophysical survey of the near subsurface
5. Create 3D representations of monuments, structures, and landscapes using photogrammetry and scanning.
6. Communicate results to stakeholders and the public using digital methods.

Upon completion of this course, students should:

- 1) Possess a broad understanding of the array of digital methods that are available for collecting, managing, analyzing, and disseminating archaeological data.
- 2) Be able to design a research project that uses one or more digital methods.
- 3) Assess the outcome of a digital archaeology project.
- 4) Communicate the results of research via digital media.
- 5) Be familiar with current debates in digital archaeology.