



Mining Archaeology

ANTH 3219/5219, CLST 3314/5314, NELC 4950

UNIVERSITY OF PENNSYLVANIA
SPRING 2025

Course Description

In ancient times, materials such as stone and metals were used to produce artifacts including pigments, jewelry, tools, and weapons. This course is designed to introduce students to research on the early exploitation of mineral resources. Which techniques were used to access and process raw materials in antiquity? Which archaeological methods can be used to investigate these features and artifacts? The course will provide worldwide examples through time, ranging from Stone Age flint mining, Iron Age rock salt mining to Medieval silver mining. Ethnographic studies and hands-on activities will contribute to our understanding of mining in archaeology, and artifacts from the Museum's collections will undergo scientific analysis in the Center for the Analysis of Archaeological Materials.

Approaches

The course will approach ancient mining from both a technical and human perspective. We will discuss the

- environmental,
- geological, and
- technological factors that allowed for large-scale mineral resource exploitation over time. On a human and societal level, we will dig into the lives of mining communities, looking critically at humanity's constant exploration for natural resources, the living and subsistence practices of mining expeditions and settlements, and resource trade systems that moved production and architectural materials over vast territories.

Assigned literature and discussions will take us through a series of case studies spanning from the early exploitation of stone to more recent cases of coal, minerals, and precious metals.

Central topics of the course are the methods in archaeological science and landscape mapping that help understand mining technologies and the subsistence of mining communities in antiquity. Environmental effects of mining operations are also key to our discussions.

Hands-on and experiential components include data collection using analytical methods employed in archaeology, visits to relevant analytical equipment available on Penn's campus and visits to mining sites in the area.

FRI 8:30-11:30^{AM}
Penn Museum
CAAM Classroom
MUSE 190

INSTRUCTOR

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CENTER FOR THE
ANALYSIS OF
ARCHAEOLOGICAL
MATERIALS

Penn Museum
3260 South Street
Philadelphia, PA

<https://www.penn.museum/sites/caam/>