ANTH-520: ARCHAEOLOGICAL EXCAVATION

Effective Term
Fall 2025

BOT Approval Date
01/16/2025

Discipline
ANTH - Anthropology
Course Number
520

Course Title
Archaeological Excavation

Short Title
Archaeological Excavation

Credit Status (CB 04)
D - Credit - Degree applicable

Units

Lecture Units
1.00

Lab Units
2.00

Total Units
3.00

Hours

Lecture Contact Hours
16-18
Out of Class Hours Lecture
32-36

Lab Contact Hours
96-108
Out of Class Hours Lab
0.00

Total Contact Hours
112 - 126

Total Out of Class Hours
32 - 36

Total Student Learning Hours
144 - 162

Is this an existing Extensive Lab?
No

Do you want to propose this for Extensive Lab?

No

Distance Education

No

Catalog Description

This course teaches students the professional archaeological methodologies with the systematic and legitimate recovery of objects from surface and/or buried archaeological site context using the ethical standards set by the Society for American Archaeology and Registry for Professional Archaeology. The focus is on techniques designed to preserve provenience and context of the artifacts for future scientific analysis. A field trip may be required.

Requisites

Pre or corequisite(s)

Prerequisite or corequisite(s) (must be taken simultaneously if not taken before)
ANTH-115 (with a grade of C or better) or ANTH-104 (with a grade of C or better).

Codes

TOP Code (CB 03)

2202.20 - Archaeology

CIP Code

30.1202 - Cultural Resource Management and Policy Analysis.

Repeatability Code

No

Grading Option

Letter grade OR P/NP

Learning Objectives

Learning Objectives

Learning Objective
1. Measure excavation units in accordance to standard sampling techniques.
2. Apply the vocabulary of professional archaeologists to describe site and feature conditions, excavation strategies, archaeological strata, and artifacts.
3. Differentiate archaeological vertical and horizontal strata.
4. Measure and record the X,Y,Z provenience for point-proveniences artifacts and features.
5. Organize excavation data for entry on standard official State and County site forms and in field notebooks.
6. Evaluate the data collected in order to make accurate estimations of size and depth of an archaeological site and feature.
7. Diagram precise stratigraphic profiles and plan-view maps of select portions of the archaeological site.
8. Demonstrate safe working practices for self and co-workers, as well as for the integrity of the site itself.
9. Interpret the archaeological record in a way that incorporates more diverse perspectives, especially of marginalized groups. The post-processual movement introduced Indigenous Archaeology, Feminist Archaeology, African-American Archaeology, Chicano Archaeology and more.

Learning Outcome Information

Course Learning Outcomes

Learning Outcome
1. Students will learn upon completion of the course, the basics of field archaeological excavation methods and techniques, including sampling, excavation, dating and analysis data gathering techniques.

2. Students will learn to be familiar with some of the major archaeological traditions of primarily north America.
3. Students will learn how to develop teamwork, computer database recording and imaging skills, critical and interpretive skills through self reflection and understanding personal interpretive biases

Program Learning Outcomes

Learning Outcome
1) Analyze the interrelationship between humans and their physical environment.
2) Apply the principles of cultural relativism to observations of human behavior.
3) Recognize the validity of people's variable language histories and experiences.
4) Abstract meaning (or Evaluate meaning) from the archaeological and fossil records.
5) Incorporate the scientific method in observations of human attributes (biology, behavior, language, artifacts).

Institutional Learning Outcomes

Critical Thinking: The student will analyze problems, gather and synthesize relevant information, evaluate ideas, information, and evaluate alternative points of view to create, innovate and implement effective solutions.
Cultural Awareness and Humility: The student will demonstrate knowledge of and sensitivity toward individuals of diverse ethnicity, age, gender, sexual orientation, and religious affiliations, as well as toward those individuals with diverse abilities and socio-economic classes to respectfully interact with individuals of diverse perspectives, beliefs and values while being mindful of the limitation of their own cultural frameworks.
Information and Technology Literacy: The student will access, interpret, evaluate, and apply relevant information sources and digital media effectively, and in an ethical and legal manner.
Scientific Awareness: The student will apply the scientific method of inquiry to assess potential solutions for real-life challenges by employing science-based knowledge and methodologies in daily life.

Content

Course Lecture Content

1. Introduction to the importance of archaeological excavation
   a. The connection between the controlled data collection from a site and its interpretation.
   b. Goals and purposes of processing, tratement and collecting protocols
   c. Different approaches to archaeological collections based on differing depositional conditions.
2. Ethics of Archaeological excavation
   a. Review of Federal, State, County and Tribal laws regarding archaeological resources
      i. Provenance (origin, source, history of ownership)
      ii. Collection management
      iii. Treatment of Human remains and associated funerary objects under the Native American Graves Protection and Repatriation Act and its State of California counterpart
      iv. California Environmental Equality Act and its amendment Assembly Bill 52 and the Tribal Cultural Resources as a protected class under CEQA
3. Tribal and Community Consultation and repatriation
   a. Including the communities that are the descendants of those that left material culture is important
      i. Aids in more accurate interpretations by including diverse viewpoints
      ii. Mitigates the potential harm of archaeological investigations
      iii. Helps heal from past practices of archaeological investigations that may not have included community outreach.

Course Lab Content

1. Preparation for Excavation
   a. Archival research: previously collected information about the site
   b. Establishing a grid and sampling strategy
   c. Establishing excavation unit locations
2. Trading and use and safety of using excavation tools
   a. Tool Description
   b. Appropriate use for each of the hand tools
   c. Tool safety
3. Excavation
   a. Remove dirt
   b. Collect artifacts and samples

i. Record provenience in reference to site datum
ii. Note & record provenience in reference to stratum
iii. Note & record data about context for artifacts

c. Forms and data recording
d. Screen dirt
e. Profile and plan-view drawings; photographs

4. Excavation completion
a. Completion of field notes and summary forms
b. Artifacts & samples turned in to archaeology lab for processing
c. Discussion of recovered artifacts, data, and conclusions about site
d. Discussion NAGPRA and the complexities of uncovering human remains and the tribal consultation process for repatriation
e. Discussion and modeling of archaeological site workplace safety.

Methods of Instruction

Method

Discussion

Integration

Students will use the official State Archaeological Site forms, archaeological tools and methodologies that they would use on any Cultural Resources Management job. That means that during most class meetings, the class will be at the dig with supervision and discussion of processes carried out individually with students in their excavation units. The discussion groups will be used to explore complex cultural topics like repatriation and differing cultural understanding of excavating the past especially when it come to human remains.This is very important to reflect on potential cultural and gender biases.

Method

Field Experience

Integration

This is an experiential learning class in field archaeology. Students will map, excavate, recover, and describe artifacts and features within a site. This class will give students real-world experience in the profession of Cultural Resource Management archaeology and afterwards will have the essential skills to be hired by a CRM company. It is important to learn how to work as a team with people with from different cultures and with different abilities.

Method

Individualized Instruction

Integration

Instructor will spend time separately with each individual student and occasional as a group. Instruction may vary depending upon the kinds of features excavated and artifacts uncovered in different units and under different excavation techniques.

Method

Lecture

Integration

At the beginning of every day, a lecture will be used to introduce basic concepts to be explored that days find activities. This could include sampling techniques, radiocarbon dating, botanical flotations, etc. Lectures will also include presentations on the diversity of cultural perspectives towards the profession of archaeology.

Method

Reading

Integration

Readings are required to incorporate examples of archaeological sites, artifact recovery, & particular archaeologists into the discussions about this site. The reading os the best place to address diversity in interpreting the archaeological resort. This includes Feminist Archaeology, Indigenous Archaeology, African American Archaeology, etc. Many diverse authors clearly address issues in archaeological interpretation.

Methods of Evaluation

Method

Other

Integration

Students will be observed at work for assessment of appropriate tool use, appropriate handling of artifacts. Different cultures have diverse views on the handling of artifacts and these perspective are essential for creating a equitable and inclusive learning environment. The correct care of excavation tools and safety will be reinforced. These will be evaluated in realtime for formative assignments.

Method

Exams/Tests

Integration

This is a skills-based course and exams will be in the form of practica. Every student will need to demonstrate they can complete standard forms, excavate levels, measure in metric, establish a grid and units, make maps and drawing of features and artifacts. Additionally, some basic skills will require written exams for mapping and measuring exercises. This exams will be graded for accuracy and arithmetic correctness.

Method

Class Work

Integration

Stratigraphic profile and unit floor plan drawings will be assessed for correct provenience information based upon measurements taken within the excavation unit. The accuracy of the drawings will be evaluated in realtime for formative exercises. Forms and field notebooks will be assessed for completeness, accuracy, and adequate attention to detail on a daily basis. This includes peer review. The accuracy of the drawings will be evaluated in realtime for formative exercises.

Method

Class Participation

Integration

Class discussions will be held to make interpretations of excavation data and features and artifact distribution found. These interpretations will be focused on understanding human activities in the past using standard archaeological vocabulary and concepts. Ethnographic information will supplement the interpretations. The accuracy of the drawings will be evaluated in realtime for formative exercises.

Assignments

Assignment Type

Other

In-class and/or outside of class

In-class

Formative or Summative
Formative

Assignment
With two metric measuring tapes, establish a 1x1m or 2x2m excavation unit with string and back-staked unit stakes. Accurately complete a state archaeological site forms. Point provenance a pedestaled artifact in an excavation until using the X, Y, Z coordinate system. Units will be assessed by the instructor measuring the dimensions and depth use the metric system.

Assignment Type
Writing

In-class and/or outside of class
In-class

Formative or Summative
Summative

Assignment
Provide an interpretation of the recovered archaeological data. The purpose is to establish an understanding of the prehistory of California. This includes analysis of the data, propose a theory and explain how the data can be used to support the data. The data interpretations will be assessed by the instructor in accordance to industry standards.

Assignment Type
Other

In-class and/or outside of class
In-class

Formative or Summative
Formative

Assignment
Evaluate soils and prepare them for further analysis. This could include botanical or C14 samples. The assignment will be assessed by the instructor using professional standards. Samples will be submitted to other professionals.

Assignment Type
Writing

In-class and/or outside of class
In-class

Formative or Summative
Formative

Assignment
Make maps locational information using standard metic UTM system. The assignments will be checked by other students and the instructor using USGS map data website.

Assignment Type
Other

In-class and/or outside of class
In-class

Formative or Summative
Formative

Assignment
Make scientific illustrations of objects which includes detailed and accurate metric measurements. This assignment will assessed for completeness and accuracy by comparing against photographs of the same objects..

Assignment Type
Writing

In-class and/or outside of class
In-class

Formative or Summative
Formative

Assignment
Complete standard State of California archaeological site forms completely and accurately. This will be assessed for accuracy and completeness using the state standard.

Assignment Type
Writing

In-class and/or outside of class
Outside of class

Formative or Summative
Formative

Assignment
Using a sample assemblage of a particular media (pottery, stone, bone etc), write multiple possible interpretations of the data sets using differing world views. Use experiences from different subcultures (age groups, gender, ethnic background etc) to aid in diverse interpretations.

Assignment Type
Reading

In-class and/or outside of class
Outside of class

Formative or Summative
Summative

Assignment
Read and analyze the data interpretation results from a post-processual author. This can be in feminist archaeology, Indigenous archaeology, Asian archaeology, African-American Archaeology or others. Examples:

Joe Watkins work "Indigenous Archaeology: American Indian Values and Scientific Practice"

Sarah Lacy. Woman the Hunter: The Archaeological Evidence. American Anthropologist Vol. 126, Issue 1: pp. 19-31. Published September 04 2023.

Atalay, Sonya (2006a). "Guest Editor's Remarks: Decolonizing Archaeology". American Indian Quarterly. 30 (3&4). University of Nebraska: 269–279

Course Materials

Textbooks

Wiley-Blackwell, Archaeologist's Fieldwork Guide 2nd Edition (2023) 978-1119845317
Geoffrey John Tassie, Lawrence Stewart Owens. (2010)
Standards of archaeological excavation : a field guide to the methodology, recording techniques and conventions
9781906137175

Other Resources

Excavation tools: shovels, trowels, dustpans, brushes, buckets, plastic bags, labels, GPS unit, string, stakes, flagging, sharpies, pencils, screens, measuring tapes, plumb bobs, line levels, compasses, rulers, calculator, and digital camera. Simulated artifacts for building the site simulation and lots of dirt.

Class Size Information

Class Size

18

Class Size Category

J - Specialty lab

Diversity and Inclusion

Explain how diversity and inclusion(e.g., gender, culture/race, sexuality, etc.) is infused into the course.

When interpreting the archaeological record, students must think about how it reflects differing gender roles, economic status, ethnic identities and many complex social constructs.

Describe how assignments, instruction, evaluation, course content, and interactions are contextualized for diverse learners promoting an equitable course.

This is primarily an experiential course, however many different modalities will be used to collect accurate data. Evaluations will include both written and interpretive exercises.

Interactions

Explain how the course will incorporate student-to-student interaction.

Students will need to work as a team in order to accurately collect stratigraphic and horizontal/vertical artifact providence information. This allows for people of differing culture, gender and background to better understand alternative viewpoints to interpretation while maintaining am common set of scientific methodologies.

Explain how the course will incorporate instructor-to-student interaction.

Students will need to work with the instructor in order to learn standard archaeological methodologies in an experiential way. Similarly, the instructor will give realtime critiques of the students handling of archaeological objects and features. This type of interaction will help normalize the methodologies across differing backgrounds, cultures, genders, etc. of the students.

Explain how the course will incorporate student-to-content interaction.

This is a hands-on course. Students will be in physical and interpretive contact with archaeological sites, features and artifacts. Only through the interaction of student to the contents from the sites, can they understand the subtleties of temporal and physical changes goes that occur on artifacts through time and soil geology and chemistry.

Explain how the course will incorporate student-to-self interaction (metacognitive).

The most significant part of archaeology is the interpretation of the archaeological record. Diverse views allows for deeper and more complete interpretation. Students will be encouraged to self reflect on their own biases (like economic backgrounds, cultural differences, gender identities, etc.) while making their interpretations and see how other's potential biases impact differing interptraticons of similar and different archaeological data sets.

Key: 171