ZOOARCHAEOLOGY IN THEORY & PRACTICE:
ANALYZING MATERIALS FROM LOS ANGELES NATURAL HISTORY MUSEUM AND CHANNEL ISLANDS, CALIFORNIA (US)

Course ID: HIST 301ZA
July 11-August 5, 2022

Academic Credits: 8 Semester Credit Units (Equivalent to 12 Quarter Units)
School of Record: Iowa Wesleyan University

DIRECTOR
Dr. Ariel Taivalkoski – Research Assistant Professor, University at Buffalo (arieltai@buffalo.edu)

PROGRAM DESCRIPTION
This zooarchaeology field school is a laboratory program that focuses on the identification and interpretation of archaeological faunal materials. In addition to covering theoretical approaches to faunal remain interpretations, laboratory course work will concentrate on developing proficiency in identifying mammal, fish, bird, and herptile specimens. Using the large comparative collections at the Los Angeles Natural History Museum (third largest such museum in the U.S.), students will analyze archaeological faunal assemblages from the Channel Islands, California. This program will provide seminar course work including the study of taphonomic processes, assemblage formation, and the use of bone data to investigate archaeological questions. The course goal is to develop experienced and capable researchers in zooarcheology, a first step to a possible career in academia or the Cultural Resource Management sector. Students will have the opportunity to contribute to a scientific publication. Honors thesis and graduate level research work with the collections is possible and encouraged.
COURSE OBJECTIVES

The objective of this program is to prepare students to perform zooarchaeological analyses. This objective is accomplished by 1) providing students with the practical skills to identify animal bones from archaeological sites, 2) teaching students how to employ zooarchaeological assemblages to answer broader research questions, and 3) experience in writing zooarchaeological interpretation for both scholarly and public audiences.

Students will engage in hands-on analyses of zooarchaeological assemblages from the Channel Islands, and document their analyses for interpretation and reporting. Students will use the comparative collection at the Los Angeles Natural History Museum. Students will participate in the cleaning, sorting, tabulation, and curation of the zooarchaeological material used during this program.

LEARNT SKILLS

We are aware that many students may not seek academic careers but will pursue employment in the private sector. To that end, we are following the Twin Cairns Skills Log Matrix™ (https://twincairns.com/skill-set-matrix/) and will provide training for the following skills:

<table>
<thead>
<tr>
<th>Skill</th>
<th>Skill Definition</th>
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<tbody>
<tr>
<td>Artifact Washing</td>
<td>Ability to wash different artifact types while maintaining their material characteristics for research purposes</td>
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Artifact Recovery | Ability to record, safely excavate and properly store artifacts and ecofacts made of different types of materials (ceramics, metal, lithics, etc.) and various levels of fragility
Artifact Processing | Ability to identify, collect and record a wide range of artifact types, understanding their relative fragility within different site types and conditions
Classification & Seriation | Understand how to assign artifacts to accepted cultural/geological spheres, across space (classification) and across time (seriation)
Artifact Curation | Ability to safely register, document and store a wide range of artifact types in curation facilities following state and federal laws
Public Interpretation | Ability to understand site history and provide clear and coherent interpretation for the public

COURSE SCHEDULE
Course structure may be subject to change upon directors’ discretion

WEEKLY SCHEDULE

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Lecture Topics</th>
<th>Lab Practicums</th>
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<tbody>
<tr>
<td></td>
<td>History of Zooarchaeology</td>
<td>Distinguishing between mammal, fish, bird, etc.</td>
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<td></td>
<td>Introduction to Channel Islands Archaeology</td>
<td>Distinguishing humans from other mammals</td>
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<td></td>
<td>Overview of archaeology and excavating faunal remains</td>
<td>Zooarchaeological Quantification</td>
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<td></td>
<td>Types of zooarchaeological data</td>
<td>Setting up a zooarchaeological analysis</td>
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<tr>
<th>Week 2</th>
<th>Lecture Topics</th>
<th>Lab Practicums</th>
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<tbody>
<tr>
<td></td>
<td>Reference collections: using them and creating them</td>
<td>Flotation</td>
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<td></td>
<td>Wild vs. domesticated animals</td>
<td>Cataloguing zooarchaeological materials</td>
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<tr>
<td></td>
<td>Intro to human-animal relationships; ethnozoology</td>
<td>Using comparative collections</td>
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<tr>
<td></td>
<td>Skeletal part representation and assessing human activity</td>
<td>Assessing skeletal part frequencies</td>
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<tr>
<th>Week 3</th>
<th>Lecture Topics</th>
<th>Lab Practicums</th>
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<tbody>
<tr>
<td></td>
<td>Processing for food and material</td>
<td>Pathology</td>
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<td></td>
<td>Taphonomy in zooarchaeology</td>
<td>Taphonomy</td>
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<tr>
<td></td>
<td>Pathology in zooarchaeology</td>
<td>Cut marks and bone working</td>
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<td></td>
<td>Metrical recording and analysis</td>
<td>Measurement methods</td>
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<tr>
<th>Week 4</th>
<th>Lecture Topics</th>
<th>Lab Practicums</th>
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<tbody>
<tr>
<td></td>
<td>Applied zooarchaeology</td>
<td>Seasonality and Aging</td>
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</table>
Techniques in zooarchaeology
- Geochemistry
- Writing a zooarchaeological report

Intro to microscopy techniques
- Producing a contextual analysis
- Curating zooarchaeological materials

TYPICAL WORK DAY

MONDAY, WEDNESDAY, FRIDAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:00 AM - 10:00 AM</td>
<td>Lecture</td>
</tr>
<tr>
<td>10:00 AM - 12:00 PM</td>
<td>Lab Activity</td>
</tr>
<tr>
<td>12:00 PM - 1:00 PM</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 PM - 6:00 PM</td>
<td>Lab Activity/Weekly quiz at 4 PM Fridays</td>
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TUESDAY, THURSDAY

<table>
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<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:00 AM - 10:00 AM</td>
<td>Lecture</td>
</tr>
<tr>
<td>10:00 AM - 12:00 PM</td>
<td>Writing project meeting</td>
</tr>
<tr>
<td>12:00 PM - 1:00 PM</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 PM - 6:00 PM</td>
<td>Lab Activity/Guest lectures</td>
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SATURDAY

Optional field trips- Schedule announced prior to first week of field school

ACADEMIC GRADING MATRIX

Students will be graded based on their work as follows.

- 20% lab notebook
- 20% Weekly Quizzes- Each week there will be 2 quizzes, a bone quiz and a theory quiz. The Bone quiz will be a practical evaluation of the student’s zooarchaeological identification skills. The theory quiz will be a multiple choice and short answer quiz covering zooarchaeological theory and methodologies covered during the week.
- 20% Contribution to Paper
- 20% Social Media Post- Students will prepare a social media post featuring one of the activities conducted during this program. Post may be featured on the Center for Field Sciences or Natural History Museum, LA social media.

SKILLS MATRIX LEVELS

The school instructors will evaluate the level each student achieved on the list of skills provided above. Each skill will be graded on one of the following three levels:

**Basic**: Can perform the skill/task with some supervision.
**Competent**: Can perform the skill/task without any supervision.
**Advanced**: Can perform the skill/task and teach others how to do it.

ATTENDANCE POLICY

The required minimum attendance for the successful completion of the field school is 85% of the course hours. Any significant delay or early departure from an activity will be calculated as an absence from the activity. An acceptable number of absences for a medical or other personal reasons will not
be taken into account if the student catches up on the field school study plan through additional readings, homework or tutorials with program staff members.

**PREREQUISITES**

None. This is hands-on, experiential learning and students will study on-site how to conduct zooarchaeological research. Students are required to come equipped with sufficient excitement and adequate understanding that the work requires patience, discipline, and attention to detail.

**PROGRAM ETIQUETTE**

This program takes places in an active museum and students should be respectful of visitors and workers. Please conduct yourselves as though you are a representative of the museum at all times. Allow visitors first access to elevators, be quiet and orderly while navigating the museum, etc. More detailed instructions about museum policy will be provided on first day of program.

**EQUIPMENT LIST**

**Pens/pencils:** You will be required to keep a lab notebook during this program. Bring pens and pencils for drawing bones and taking notes.

**Lab notebook:** Blank notebook, any type/variety. If it is your preference you may keep a digital copy of your lab notebook instead of a physical one. Just be aware that you will need to provide drawings/photos within the lab notebook.

**TRAVEL & MEETING POINT/TIME**

We suggest you hold purchasing your airline ticket until six (6) weeks prior to departure date. Natural disasters, political changes, weather conditions and a range of other factors may require the cancelation of a program. The CFS typically takes a close look at local conditions 6-7 weeks prior to program beginning and makes a Go/No Go decision by then. Such time frame still allows for the purchase of deeply discounted airline tickets while protecting students from potential loss of airline ticket costs if CFS is forced to cancel a program.

Students will meet at the Natural History Museum in Los Angeles at 900 W Exposition Blvd, Los Angeles, CA on Monday July 11 at 8:00 AM.

If you missed your connection or your flight is delayed, please call, text or email project director immediately. A local emergency cell phone number will be provided to all enrolled students.

**VISA REQUIREMENTS**

This is a domestic program. No visa is required for US Citizens.

**MEALS & ACCOMMODATION**

This project DOES NOT provide accommodations or food. For lunch breaks, there are several food options near the Natural History Museum, Los Angeles. You may also bring your lunch, as there are refrigeration options available for your use.

**Restaurants**

- **The NHM Grill in the NHM, Los Angeles** Small café offering limited grab’n’go options
- **Hotbox Burgers** 1030 W Martin Luther King Jr Blvd Suite #108, Los Angeles, CA 90037
- **The Lab Gastropub** 3500 S Figueroa St, Los Angeles, CA 90007

**Grocery Stores**

- **Expo Super Market** 1019 W Martin Luther King Jr Blvd, Los Angeles, CA 90037
- **Trader Joe’s** 3131 S Hoover St Ste 1920, Los Angeles, CA 9008
ACADEMIC CREDITS & TRANSCRIPT

Attending students will be awarded 8 semester credit units (equivalent to 12 quarter credit units). Students will receive a letter grade for attending this field school based on the assessment matrix (above). This program provides a minimum of 160 direct instructional hours. Students are encouraged to discuss the transferability of credit units with faculty and the registrar at their home institutions prior to attending this program.

Students will be able to access their transcript through our School of Record – Iowa Wesleyan University. IWU has authorized the National Student Clearinghouse to provide enrollment and degree verification (https://secure.studentclearinghouse.org/tsorder/schoolwelcome?icecode=00187100). Upon completion of a program, students will get an email from IWU with a student ID that may be used to retrieve transcripts. The first set of transcripts will be provided at no cost, additional transcripts may require payment. If you have questions about ordering a transcript, contact the IWU office of the registrar at registrar@iw.edu.

REQUIRED READINGS

PDF files of all mandatory readings will be provided to enrolled students via a shared Dropbox folder.


**RECOMMENDED READINGS**


