

ARCHAEOLOGY 3720
Archaeological Materials Analysis
Spring 2020

Instructor: Shawn Bubel

Office: B872

Phone: 403 329-2531

E-mail: bubest@uleth.ca

Website: <http://people.uleth.ca/~bubest/>

Office Hours: Mondays 1:30-2:30 pm or by appointment

Lecture: M / W 12:00 – 1:15 pm

Room: C720

Teaching Assistant: Samantha Kondor

Email: samantha.kondor@uleth.ca

Office: C720

Office Hours: Wednesdays 9:30-10:30 am

Lab: T 3:00 – 6:00 pm

Course Description:

This course focuses on archaeological laboratory methods and the analysis of cultural remains. Much of an archaeologist's time is spent analysing artifacts and ecofacts, as well as samples and data gathered in the field. Through lectures, assignments, group activities, and class discussions we will cover the major areas of archaeological laboratory research. Topics will include contextual field data, stratigraphic analysis, archaeometry, general cataloguing, lithic artifacts, groundstones, ceramics, faunal remains, human remains, shell and bone artifacts, perishables, botanical remains, and historical artifacts.

By the end of the course you will know the basic constituents of the archaeological record and appreciate the importance of context and provenience of archaeological data. You will be able to construct an archaeological catalogue for different types of cultural remains, which includes attribute classification. You will work directly with archaeological collections, gaining experience in artifact/ecofact identification and analysis. You will also learn how to knap lithic artifacts and create ceramic pieces.

Required Reading:

The text *Archaeological Laboratory Methods: An Introduction* (7th Edition, 2019) by Mark Sutton and Brooke Arkush will be used for this class. Additional resources will be handed out in class or upload onto Moodle. Class attendance is strongly suggested as lectures will include additional information.

Course Requirements and Grading:

You will be evaluated based on seven lab assignments, a midterm exam, and a final exam. You must actively participate in all course elements. Assignments must be submitted at the beginning of class on the date they are due. Late assignments will be penalized 20% every day they are late. No make up exams will be given except in the case of serious illness as verified by a doctor's note or family emergency as verified with documentation.

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|-----------------------------|-----|--|
| Assignments: | 55% | 7 Assignments worth 5% or 10% each |
| Midterm Examination: | 15% | January 29 – in class |
| Final Examination: | 30% | To be scheduled during the exam period |

Grading Scheme:

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|-----------|----------|----------|----------|
| A+ 90-100 | B+ 77-79 | C+ 67-69 | D+ 56-59 |
| A 85-90 | B 73-76 | C 63-66 | D 50-55 |
| A- 80-84 | B- 70-72 | C- 60-62 | F 0-49 |

Laboratory Assignments:

There are seven lab assignments worth 5% or 10% each. Lab time will be used to work on the assignments but you will need to spend additional hours in the archaeology classroom to complete them. You may access the classroom throughout the semester to do so. Each assignment is due at the beginning of class on the date listed below. You may work together but you must hand in your own assignment, written in your own words.

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|-------------------|-----------------------------------|-----|--------------|
| Lab Assignment 1: | Site Analysis | 5% | Due: Jan. 14 |
| Lab Assignment 2: | Stratigraphy/Site Plans | 10% | Due: Jan. 28 |
| Lab Assignment 3: | Lithics and Groundstones | 10% | Due: Feb. 11 |
| Lab Assignment 4: | Ceramics | 10% | Due: Mar. 3 |
| Lab Assignment 5: | Faunal Remains and Bone Artifacts | 10% | Due: Mar. 17 |
| Lab Assignment 6: | Plant Remains and Perishables | 5% | Due: Mar. 24 |
| Lab Assignment 7: | Historical Artifacts | 5% | Due: Mar. 31 |

Lab Fee:

There is a small **\$50** lab fee to cover the ceramics production workshop at the Casa ceramic studio and obsidian for stone tool knapping. This will be charged to your student account.

Participation and Presentations:

Class participation is vital because of the nature of the course. In addition to working together with your classmates on the assignments and participating in class discussions, you will be required to give several small presentations on various topics throughout the semester.

Archaeological Materials Analysis Course Outline

- 1 Introduction**
- 2 The Archaeological Project**
 - Research Design
 - Excavation
 - Collections
- 3 The Archaeological Catalogue**
 - Recording
 - Processing
 - Storage
 - Reference Collections

- (3b) Stratigraphy and Site Formation Processes**
 - Provenience
 - Formation Processes
 - Context
 - Stratigraphic Analysis
 - Harris Matrix System using the ArchED Program

- 4 Analysis of Lithics (Flaked Stone Artifacts)**
 - Definition
 - Raw Materials
 - Stone Tool Production
 - Stone Tool Typology
 - Stone Tool Analysis
 - Knapping and Analysing your own lithic artifacts

- 5 Analysis of Groundstones**
 - Definition
 - Types
 - Identification
 - Analysis

- 6 Analysis of Ceramics**
 - Definition
 - Classification
 - Raw Materials (Clays)
 - Analysis
 - Manufacturing Methods
 - Dating (Typology and Seriation)
 - Field Trip to CASA

- 7 & 10 Analysis of Faunal Remains (ecofacts and artifacts)**
 - Definition
 - Taphonomy
 - Recovery
 - Taxonomic Classification
 - Identification
 - Bone Tools
 - Uses of Faunal Data

- 12 Analysis of Human Remains**
 - Definition
 - Legal and Ethical Issues
 - Identification
 - Analysis
 - Interpretations
 - Conservation of Human Remains

- 8 Analysis of Perishables**
 - Definition
 - Tools and Artifacts
 - Preservation
 - Conservation

- 11 Analysis of Plant Remains**
 - Definition
 - Recovery
 - Identification/Taxonomy
 - Uses of Plant Data

- 9 Analysis of Historical Remains**
 - Definition
 - Historical Documents
 - Types of Historical Artifacts
 - Metal Artifacts
 - Ceramic Artifacts
 - Glass Artifacts
 - Other Artifacts

- 13 Archaeometry and Special Analyses**
 - Relative and Absolute Dating Methods
 - Material Sourcing
 - Chemical Signatures
 - Use-wear Analysis
 - Residue Analysis
 - Matrix Analyses