

**Arch 5110 FA Archaeological Science Seminar
Fall 2023**

Instructor/coordinator Scott Hamilton
Office: BB2001E
Telephone: 343-8742

classroom BB2002
Tue and Thur, 10 am to 11:30 am
email: shamilto@lakeheadu.ca

This course addresses communication and critical appraisal in archaeological science. It emphasizes exploration of methods and their theoretical underpinnings. It contributes to skills development in information synthesis and presentation, and critical evaluation of research proposals, briefing documents, oral presentations and formal seminars.

Both faculty members and students will lead seminars that address various research topics in the archaeological and bio-anthropological sciences. You are expected to read assigned background materials, listen to the presentations and participate in the discussion. You will submit short written 'reflections' or critiques about these issues, and contribute a seminar presentation on a topic of your choice.

Review the supporting readings before the presentation to be better prepared to meaningfully participate. The assigned/suggested readings will be available on MyCourseLink (folders with presenter's name on them). PDF versions of Hamilton's class presentations will also be made available. Some of the other presenters might also make their materials available.

The primary 'learner outcome' is to refine students' critical thinking, plus written and oral communication skills. Grading emphasis is on demonstrated comprehension of the topics at hand, and the quality of communication.

Writing must be focused and well-crafted. Academic prose may be disjointed, convoluted, incompletely argued and jargon laden. Work to do better. The small writing assignments will help you develop better writing skills. Think carefully about your objectives and write deliberately and sparingly. Readers' and listeners' attention span is generally short. You must capture interest and provide information that builds to a defensible conclusion. Also important is recognition of uncertainty and potential bias. When writing about a controversy or difference of interpretation, offer a critically balanced summary of positions, the basis for interpretation, and how well the data supports the divergent conclusions.

Lakehead's Accommodation & Confidentiality Statements:

Lakehead University is committed to achieving full accessibility for persons with disabilities/medical conditions. Part of this commitment includes arranging academic accommodations for students with disabilities/medical conditions to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability/medical condition and think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please email sas@lakeheadu.ca or visit <https://www.lakeheadu.ca/faculty-and-staff/departments/services/sas>

Grading

- 3 critical reviews of papers/presentations (800 words submitted as text documents to shamilto@lakeheadu.ca) (3 x 10%)
- research 'speed dating' oral presentation (10%)
- 30 minute seminar presentation (25%)
- 10-15 page paper discussing an instructor-approved topic (25%)
- class participation (10%)

Week 1 (Sept 5, 7)

- Wk1a: Course Introduction
What is academic criticism?
Wk1b: Role of Theory in Research
Readings: Selected articles re Indian Residential School mortality and unmarked graves

Week 2 (Sept 12, 14) Scott Hamilton

- Wk 2: Class discussion of newspaper editorial content re Indian Residential School mortality. Make sure to address the readings, you are expected offer perspective in the class.
- Wk 2b: Role of Theory in Research, cont'd

Week 3 (Sept 19, 21) Matt Tocheri:

- Topics in PaleoAnthropology. Discoveries, Debates, and the Details: Deciphering the Complexities and Incompleteness of the Hobbit Fossil Record.

Readings <https://drive.google.com/drive/folders/1iihYJO8OtTNmXiE5i5MdSI-aaCl7VpQm?usp=sharing>

Podcast H. floresiensis <https://pod.link/originstories/episode/08f6e67c681ab2579279e6ca4e31dc67>

Week 4 (Sept 26, 28) Scott Hamilton, Students

- **Developing a research proposal**
- **Research 'Speed Dating'**. Students have 10-15 minutes to informally talk about their proposed thesis research. Introduce your thesis idea, how you became interested in the topic, why you think it is interesting and intellectually important, and how you might go about addressing it.

Week 5 (Oct 3-Oct 5)

- Hamilton: Introduction to cartography in archaeology
- Hamilton: Remote Sensing and its application to archaeology

Assignment due. Critical Review #1

Study Week (Oct 9 to 15)

Week 6 (Oct 17, 19) Metcalfe, Hamilton

- **Oct 17** Metcalfe: 'Interdisciplinary Archaeology: A Promontory Caves Example' (readings TBA)
<https://youtu.be/mCDz7ZZUWL8>
<https://podcasters.spotify.com/pod/show/hannah56078/episodes/Virtual-book-event-for-Holes-in-Our-Moccasins--Holes-in-Our-Stories-e28c2c9>
- **Oct 19** Hamilton: UAVs and LiDAR applications to archaeology Readings: read one or two.
Hamilton, S. 2018 'More than pretty pictures: Drones, bison kills, and considerations of cultural landscapes' Archaeological Survey of Alberta, Occasional Paper No. 28, pp.53-91.
Hamilton, S. 2017 'Drone mapping and photogrammetry at Brandon House 4'. *Society for Historical Archaeology*. 51(4), 563-575. DOI 10.1007/s41636-017-0069-4.
Hamilton, S. and J. Stephenson 2017 'UAV (drone) aerial photography and photogrammetry and its utility for archaeological site documentation'. Occasional Paper #2, Ontario Association of Professional Archaeologists.
http://www.apaontario.ca/resources/Documents/APA_OccasionalPaper2_DroneTesting_2017.pdf
Hamilton 2019. Remote sensing at the Sourismouth Forts Archaeological Survey of Alberta, Occasional paper No. 39.
Hamilton 2018 <https://open.alberta.ca/publications/occasional-paper-38-more-than-pretty-pictures>

Week 7 (Oct 24, 26) Scott Hamilton

- Wk7a Why is 'Near surface Geophysics' less widely used in N America compared to Europe?
- Wk 7b Case studies in the application of near-surface geophysics to Canadian Archaeology
 - Proton Magnetometry and fur trade posts
 - Gradiometer and GPR survey at Whitefish Lake precontact site

Week 8 (Oct 31, Nov 2) Tim Kaiser, Scott Hamilton:

Oct 31 Kaiser Adriatic Islands Project - a longitudinal study of Adriatic interactions, 6000 BCE - 500 CE (zoom presentation linked to an Orillia class)

- Nov 2 **Hamilton** Practical considerations of Archaeological consulting. .

Assignment due. Critical Review #2

Week 9 (Nov 7, 9) Tamara Varney, Scott Hamilton

- **Varney** topic TBA
- **Hamilton** Indian Residential Schools: Historical and socio-political context, operations, 'death/burial' investigations, application of non-invasive methods.

Week 10 (Nov 14, 16) Hamilton

- The Archaeology of 'Contested Ground'.
- Case Study of the Battle of 'Little Big Horn' or 'Greasy Grass'
- **Contingency** Case Study of High Falls Burial Project (Is this research 'advocacy' or not?)
- Readings: Hamilton, Morrisseau and McCrady 'New Solitudes: Conflicting World Views in the Context of Contemporary Northern Resource Development' Canadian Journal of Archaeology 1995 Vol 19, pp. 3-18. 'This Powerful Place' CBC IDEAS radio documentary by Jody Porter.

Week 11 (Nov 21, 23)

Student Seminars

Assignment due. Critical Review #3

Week 12 (Nov 28, 30)

Student Seminars