DRAFT

Anth 4811/5110 FA Archaeological Science Seminar

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Class: BB2002 Thur 2:30 to 5:30

This course addresses scientific communication, writing, critical appraisal and review. It emphasizes group discussion, and contributes to skills development in formulating research proposals, and developing written documents, oral presentations and formal seminars. The course may contain senior undergraduates and graduate students, with grading expectations reflecting the distinction.

It includes presentations in archaeological and biological anthropological sciences by the instructor, guests and students. While discussing anthropological issues, the primary objective is for students to reflect on content, refine critical thinking, and express opinion through written and oral communication. Grading emphasis is on <u>student comprehension of the topics</u> at hand, and the <u>quality of written and oral communication</u>.

<u>Professional writing should be focused and well-crafted.</u> Ironically, most academic writing is not well-written. Think carefully about writing objectives, and write deliberately and sparingly in simple and direct sentences with correct punctuation. Readers' attention span is generally short. You need to capture and engage interest, and provide information that builds to a defendable conclusion. When writing about a controversy, seek to offer a critically balanced summary of divergent interpretations, and how well the data supports the conclusions offered. You don't have to determine who is right, but rather, balance your presentation so that your audience can make up their own minds.

Grading

Undergraduate Students

- 2 critical reviews of published papers (500 words) (2 x 10%)
- 2 critical summaries of class presentations (200-500 words) (2 x 10%)
- 20-30 minute seminar presentation addressing archaeology or physical anthropology (20%)
- 10-15 page paper discussing a topic approved by the instructor (30%).
- class participation (10%)

Graduate Students

- 2 critical review of published papers (800 to 1200 words) (2 x 10%)
- 1 critical review of presentation (500 words) (1x10%)
- research 'speed dating' (10%)
- 30 minute seminar presentation (20%)
- 15-20 page paper discussing an instructor approved topic (30%)
- class participation (10%)

Critical Review: Brief and focused written summary of a piece of work. It should identify study context, theoretical orientation, objectives, methods, data presentation, and conclusions. The critical part involves evaluation of how well the author addresses the objectives, whether the data is appropriate, sufficient and valid for the question, and whether the conclusions are consistent with the data.

Research 'Speed Dating': Sometimes called an 'elevator pitch', offer a casually interested audience a short and focused lay-summary of your research interests. Imagine you are speaking to a colleague, a member of general public, a potential funder, or your grandmother. You generally have 10 to 15 minutes to make your pitch (aim for 10 minutes). What is your research about, why is it interesting and important? How will you do the research? What might be some of the important research outcomes?

Seminar: Students will lead a seminar on a topic of their choosing (approved by the instructor). Effective seminars address topics that engage the audience, demonstrates why the question is intellectually interesting, and presents the essential background information that lead to conclusions. They require coherent and organized information, effective oral presentation (audio-visual) skills, and the ability to engage the audience and keep their interest. While you need to know the information, you also need to be an effective 'story-teller'. This is a skill that develops with practise. The audience is expected to offer constructive feedback and questions to help improve performance.

Research Paper: The student chooses a topic and gets it approved by the instructor. It is permitted to address the same topic as the seminar, but the paper must reflect an amplification of the topic. The paper requires mastery of written communication skills framed around introducing the research issue and its intellectual importance, the context of such enquiry, marshalling and presentation the information needed to address the question, and then summary leading to conclusions. Such papers are a more formalized 'crystallization' of scholarly output, and must be careful crafted prose.

This is a brand new course in a new graduate program. We are figuring it out as we go along. Student feedback will be gratefully received. Reading assignments will likely be offered by the individual presenters. These will be deliberately limited in order to encourage students to develop and use their literature review skills.

If students are going to be late with assignments, to get late grading consideration the instructor must be informed before the due date, with a plan for when the late assignment will be submitted.

Week 1 Sept 5 Course Introduction

- review of course expectations.
- how to be 'critical' without being unrelentingly negative.
- · background to remote sensing

Case Study: Experiments with UAVs and remote sensing in archaeological mapping.

Assignment 1: (undergrad students) Summarize and critique the UAV presentation due week 3

Assignment 1: (grad students) Do a quick <u>review of academic literature</u> regarding UAV applications in Archaeology, briefly assess Hamilton's presentation <u>relative to the broader literature</u>. due week 3

Week 2 Sept 12 A thumbnail sketch of Archaeological Theory

- How does theory drive enquiry?
- Can theory blind us to other possibilities?
- Gender, inequality, and colonialism in archaeology
- Important 'themes' in Archaeology
 - hominins and biological evolutionary theory
 - cultural evolutionary theory and the rise of social complexity
 - cultural relativism and cross-cultural comparison

Week 3 Sept 19: Scott Hamilton: Archaeological measures of fur trade social inequality.

Assignment 2: (undergrad and grad students) evaluate the theoretical orientation in Hamilton's PhD research. Due Week 4

assignment 3: (undergrad and grad students) choose a published article from your field, and review how/ if theory informs the nature of research enquiry. due week 5.

<u>Assignment 1 due</u>

Week 4 Sept 26 What is a research proposal?

- How does one go about developing one?
- Mock exercise: a research issue and strategies for addressing it.

Archaeological Science in the service of social science

• Case Study: Custer, the 19th Century Indian Wars and Propaganda: What is the role of archaeology? **Assignment 2 Due**

Week 5 Oct 3: Research 'Speed Dating'.

Graduate Students have 20 minutes to talk about what 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.

Assignment 3 due.

Assignment 4: Select, summarize and critique a published paper in your field (Due Week 7)

Week 6 Oct 10: Archaeology of the 'invisible' (or maybe Carney Matheson)

- Traditional field data collection methods in archaeology.
- What do we leave behind?
- How to sample 'tiny data sources'
- Microscopy, use wear, bio-residues.

Study Week Oct 14-18

Week 7 Oct 24: Matt Boyd Ancient Lake Superior Assignment 4 Due

Week 8 Oct 31: Tamara Varney

Week 9 Nov 7: Matt Tocheri

Week 10 Nov 14: Matt Tocheri

Week 11 Nov 21: Student Seminars

Week 12 Nov 28: Student Seminars

Term paper Due Dec 2