

Department of Anthropology

Anthropology 9101B

# Research Methods in Archaeology and Bioarchaeology Winter 2014/2015

Instructor:	Dr. Andrew Nelson
Class Time:	Friday 9:30-12:30 – SSC Room 2257
Office:	Social Science Centre 9438
Office Hours:	by appointment
Phone:	661-2111 x 84953
email:	anelson@uwo.ca

### **Course Description:**

There are several aims to this course. The proximate aim is to work with the MAs to develop their thesis research proposal, and to have the PhDs help with that process, but also to get them prepared to do their proposals next year. The ultimate aim is to examine how methodology is applied to address issues that flow from theory and to appreciate that there are common themes among the various methodological approaches that are utilized in archaeology and bioarchaeology. Among the issues that we will be addressing through readings, presentations and discussions are: the nature of anthropological research – and specifically anthropological archaeology and bioarchaeology is objective to address those questions; how is our research situated in relation to the existing literature; ethics; and the nitty gritties of data collection and analysis.

# **Grading Breakdown**

### 20% - Informed Participation and Un-graded Assignments

In a class like this, participation is expected – and it is crucial in order to make these informative and useful sessions. Thus, you are expected to come to class having done the readings and ready to engage in active discussions. In addition, there are several times where you will present material to the class.

These assignments will include:

- presenting the larger assignments (flow chart, proposal drafts etc.) in class
- thoughtful evaluation of your colleagues' presentations
- gathering relevant references and presenting them in class
- active participation in this class and in the cross-over sessions

### 20% - Research Proposal Flow Chart

For this assignment, you will state your thesis topic in a series of hypotheses, which you will then set in the context of a complete research program. The idea of doing this as a flow chart is to graphically demonstrate the relationships among the various components of your research program and to see how things *flow* from theoretical background, to research problem, to methodology to outcomes... or not. The flow chart will be presented to the group as part of the participation stuff discussed above, and it will be handed in for grading.

The flow charts will be submitted and presented to the class in week 4.

### 20% - Data Collection and Meta-Analysis

For this assignment, you will delve into the literature to find at least 3 sources that contain data that is relevant to your research topic. There are a couple of different ideas here. The first is to gather data that you will be able to use – either in helping to develop your proposal or in your actual thesis research. The second is to see how the data sets were analyzed in the first place and to think about how you might go about analyzing them – as well as your own data once you have gathered it. Questions to consider are: Is this quantitative or qualitative? What kinds of statistical analyses are done? (that you need to learn!) and so on. You will present summaries of your meta-analysis to the class, and your written part of the assignment (ca. 2500 words) will be handed in for grading.

This assignment will be submitted and presented to the class in week 10.

# 40% - Final Project – Proposal, Research Diary, Annotated Bibliography and Proposal Abstract

*Proposal* - One of the main goals of this course is to help you prepare your thesis proposal – which you must do and present to the archaeology and bioarchaeology faculty (and other interested parties) by mid-April. This is the document that will be reviewed by your supervisor, advisor and ANY other faculty member in the Department who would like to sit in on your proposal "hearing". Proposal hearings regularly involve all available faculty members with archaeology/bioarchaeology/physical anthropology backgrounds and research interests (and, technically, \*any\* faculty member in the Department with SGPS advising privileges could attend \*any\* proposal hearing), so it is important that the document you submit be detailed enough to satisfy specialists in your area while still general enough to be comprehensible to any anthropologist. Achieving this mix can be a challenge. We have tried to design this course to help towards this end.

The final assignment for this course is therefore something that you will have to complete anyway: your research proposal. PhD students don't actually have to submit this until their second year, but there is no harm in getting going on the process now.

Proposals are generally short – around 6 pages for the MA and up to 15 pages for the PhD. They should contain a number of standard features such as: an introduction, a literature review, a methods section, a conclusions (or expected conclusions) section and a comprehensive bibliography. The PhD proposals commonly follow the format of a grant application (e.g. Wenner Gren). Students should prepare the proposal that is appropriate to their level.

In week 5 we will circulate, read and discuss preliminary (3-4 page) drafts of these proposals. All students will be asked to fill out comment sheets for others.

*Research Diary and Annotated Bibliography* (due week 10) - You will begin and maintain a "research diary" over the duration of this course. This assignment requires that you develop a clear timetable regarding your research project and then keep track of your progress during the term. This is also a place where you can keep track of ideas that occur to you from time to time.

You will prepare the annotated bibliography from 30-50 sources. At least 10 of these references should include a brief (250 word) overview and description of how the source will figure in your proposal and project.

*Research Ethics Proposal* - If relevant, the first sheet of a completed proposal for UWO's Research Ethics Board.

Proposal Abstract and Presentations (due week 11)

*Proposal Abstract* – Finally, you will produce an abstract (between 200 and 300 words) of your proposal -- something accessible to a general readership that might be included on the department website. Nothing will be posted without your permission.

*Proposal Presentations* – dry runs of the proposal presentations will be done in Week 11. Proposal documents will be presented that week as well.

# **Course Readings**

Course readings will be provided on a week by week basis. Key references are presented in this outline – but additional readings will also be provided.

# Week by Week Breakdown (subject to revision)

January 9	Week 1	Introduction
		- class held with 9201/9701
January 16	Week 2	Theory and research, research questions, research design and
•		construction of proposals – I
		- your paradigm
January 23	Week 3	Theory and research, research questions, research design and
		construction of proposals – II
		- your intellectual pedigree
January 30	Week 4	Theory and research, research questions, research design and
		construction of proposals – III Presentation of flowchart in class
February 6	Week 5	Theory and research, research questions, research design and
	construction of proposals – IV	
		- discussion of proposal drafts
February 13	Week 6	The nature, acquisition and analysis of data – I
February 20	Week 7	reading week
	no class	
March 1	Week 8	The nature, acquisition and analysis of data – II
March 6	Week 9	The nature, acquisition and analysis of data – III
		Presentation of data collection and meta-analysis projects
March 13	Week 10	Ethics in anthropology, archaeology and bioarchaeology
March 20	Week 11	currently open
March 27	Week 12	Proposal Presentations – wrap up

# Details

<u>Week 1</u> – today will be a general info session with preliminary discussions of the course assignments and about research in general. Finally, we will set up the week 2 topics.

<u>Week 2</u> – In this class, we will discuss theory and research, research questions, research design and construction of proposals. The core of the discussion is how theory affects how you do research, including the concept of paradigm. Andrew will give you a series of relevant readings.

Required readings (week 2):

Kuznar, LA 1997. Chapter 1 & 2 from <u>Reclaiming a Scientific Anthropology</u> pp17-?. Altamira Press: Walnut Creek.

Chamberlin, TC 1965. The method of multiple working hypotheses. <u>Science</u> 148:754-759

Clark, GA 1982. Quantifying archaeological research. <u>Advances in Archaeological</u> <u>Method and Theory</u> 5: 217-273.

Clark, GA 1993. Paradigms in science and archaeology. <u>Journal of Archaeological</u> <u>Research</u> 1: 203-234.

Conkey, MW 2003. Has feminism changed archaeology? Signs 28:867-880.

– based on these readings, you will prepare a 1 page summary of your paradigm.

<u>Week 3</u> – Building on last week's discussion of paradigms, today will include a brief discussion of the major influences in your academic life (intellectual pedigree). In addition, you will bring 1 or 2 papers that have a discussion of paradigm that is relevant to your area of study.

More on Discussion of research questions and draft proposals For this week you should read over a selection of successful research proposals submitted by previous students in our program. These will be on file in the reading room.

In addition, Andrew will provide a series of relevant readings about research proposals.

Go online or over to the library to check out potential funding sources. Andrew will provide a copy of Wenner Gren's dissertation funding application, but there are others. Get some basic information about each source and see if you can get your hands on an application.

Last but not least, we will discuss research flowcharts, roadmaps and the like.

Required readings: Revisit the Clark 1982 reference from Week 2 – especially the second from page 230 to 242.

Davies, MB. 2007. Chapter 3 of <u>Doing a Successful Research Project.</u> Palgrave MacMillan: Houndmills.

Week 4 - Presentation of flowcharts in class.

<u>Week 5</u> - Flow chart follow-up and discussion of proposal drafts For this week we will have an overall discussion of the flow charts, where you are expected to participate in the constructive analysis of your colleagues' efforts. You should also have a draft version of your own research proposal that can be presented and discussed.

<u>Week 6</u> - The nature, acquisition and analysis of data - IThis week we will start a general discussion of archaeological and bioarchaeological data and how it is gathered.

Please bring 3 papers that are relevant to your area of interest that include some sort of discussion of data, data gathering and analysis.

Required readings: Aldenderfer, MS. 1987. On the structure of archaeological data. In: M .Aldenderfer ed., Quantitative Research in Archaeology, pp: 89-113. Sage Publications: Newbury Park.

Aldenderfer, MS. 1987. Assessing the impact of quantitative thinking on archaeological research: historical and evolutionary insights. In: M .Aldenderfer ed., <u>Quantitative</u> <u>Research in Archaeology</u>, pp: 9-29. Sage Publications: Newbury Park.

Fernandex-Duque, E., and Valeggia, C., 1994. Meta-Analysis; a Valuable Tool in Conservation Research. <u>Conservation Biology</u> 8(2): 555-561.

Kellner, CM & Schoeninger, MJ. 2007. A simple carbon isotopes model for reconstructing prehistoric human diet. <u>American Journal of Physical Anthropology</u> 133: 1112-1127.

<u>Week 7</u> – reading week

<u>Week 8</u> - The nature, acquisition and analysis of data - II This week we will discuss quantitative data and qualitative data among other things.

Required Readings: Driver, HE. 1953. Statistics in anthropology. <u>American Anthropologist</u> 55: 42-59.

Kintigh, KW. 1987. Quantitative methods designed for archaeological problems. In: M. Aldenderfer ed., <u>Quantitative Research in Archaeology</u>, pp: 126-134. Sage Publications: Newbury Park.

<u>Week 9</u> – The nature, acquisition and analysis of data – III Presentation of data collection and meta-analysis projects. Week 10 - Ethics in archaeology and bioarchaeology.

In this session, we will have a discussion of ethical issues that are specific to archaeology and bioarchaeology. This will include topics such as reburial and repatriation of skeletal or artifactual remains, the presentation of ancient artifacts in museums, the responsibility of foreign archaeologists in the countries in which they work and so on.

The Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS) - available at <u>http://www.ethics.gc.ca/eng/policy-politique/initiatives/tcps2-eptc2/Default/</u>

The Vermillion Accord on Human Remains – we have the relevant text on our web site at: <u>http://anthropology.uwo.ca/vcode1.html</u>.

Other codes...

- The code of ethics of the World Archaeological Congress WAC -<u>http://www.worldarchaeologicalcongress.org/site/about\_ethi.php</u>
- American Assoc. of Physical Anthropologists (AAPA): www.physanth.org
- Society for American Archaeology (SAA): www.saa.org
- Canadian Archaeological Assoc. (CAA): www.canadianarchaeology.com
- Archaeology Institute of America Code of Ethics Statement: <u>http://www.archaeological.org/pdfs/AIA\_Code\_of\_EthicsA5S.pdf</u>
- Research Western: <u>http://www.uwo.ca/research/services/ethics/index.html</u>

Andrew will provide some additional readings.

Please bring any articles or experiences you have had with ethical issues.

<u>Week 11</u> – I'm going to leave this week open for now. In the past I've done this as a professionalization day (but you will have done Lisa's course), or the previous weeks have slopped into this day. We'll see how things go.

Week 12 – wrap up day. Proposal presentations – general discussion

#### Graduate Course Health and Wellness Insert for Graduate Course Outlines

As part of a successful graduate student experience at Western, we encourage students to make their health and wellness a priority. Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your graduate degree. For example, to support physical activity, all students, as part of their registration, receive membership in Western's Campus Recreation Centre. Numerous cultural events are offered throughout the year. Please check out the Faculty of Music web page http://www.music.uwo.ca/, and our own McIntosh Gallery http://www.mcintoshgallery.ca/. Information regarding health- and wellness-related services available to students may be found at http://www.health.uwo.ca/

Students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate chair), or other relevant administrators in their unit. Campus mental health resources may be found at http://www.health.uwo.ca/mental\_health/resources.html

To help you learn more about mental health, Western has developed an interactive mental health learning module, found here:

http://www.health.uwo.ca/mental\_health/module.html. This module is 30 minutes in length and provides participants with a basic understanding of mental health issues and of available campus and community resources. Topics include stress, anxiety, depression, suicide and eating disorders. After successful completion of the module, participants receive a certificate confirming their participation.