ANTH 322
Method and Theory in Ecological Anthropology
Fall 2013
Tuesdays and Thursdays 9:30-11:00 am

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Class Location: TBD
Office Hours: Woods Hall 1106, Wednesday 9:30-11:30 AM and by appointment
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Course website:

Brief Description

This course is a broad exploration to the field of ecological anthropology, focusing on issues related to cooperation, the management of common property, resilience, and complexity. The main goal for the course is to help students acquire an understanding of the strengths and weaknesses of competing approaches to the question of the relationship of ecology to the social world. On the natural science side, the major approaches to be considered are behavioral and systems ecology. From the social sciences, we will explore the methods of sociocultural anthropology, evolutionary game theory, cognitive models, agent-based modeling, and political ecology. Case studies will draw on the ethnology and archaeology of Indonesia, Africa, Europe and Latin America.

Why combine anthropology and ecology in a single course? Traditionally, social scientists study social systems, and natural scientists study ecosystems. But many of the most pressing problems of our time have to do with the relationship of human societies to
the natural world. There is now abundant scientific evidence that humanity is living unsustainably, and “sustainability science” is emerging as a high priority for research and education. In this course, we will consider the strengths and weaknesses of the three major competing approaches to the study of humans and the environment: systems ecology, behavioral ecology, and political ecology. How do these approaches differ? Systems ecology focuses on the flow of energy and information in ecosystems, at scales ranging from a single organism to the planet as a whole. This is also the starting-point for investigating the resilience and robustness of ecosystems. In contrast, behavioral ecology uses the theory of natural selection to analyze the fitness benefits of social behaviors, like cooperation and competition. Finally, political ecology addresses questions about governance, power and institutions.

The best way to learn how to use these analytical tools is to see how they have been used to investigate specific cases. In addition to a core textbook on ecological anthropology Human Adaptability (Moran), we will read two classic ethnographies, The Dobe Ju/'hoansi (Lee) about African hunter-gatherers, and Priests and Programmers (Lansing) about Balinese rice-farmers. So while you are learning about ecological anthropology, you will also be introduced to the ethnology of these, and other regions. The course is very carefully organized to maximize your learning opportunities. But as you are about to discover, much about the the format is different from other classes. In addition to lectures, the course incorporates participatory activities, ethnographic film, and exercises in agent-based modeling (ABM). Finally, there is a semester-long process designed to help you write an excellent research paper. The key to success in this course is to pay very close attention to the instructions for your assignments, and to keep a close watch on the course website on ELMS for deadlines.

Textbook(s)


Grading

<table>
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<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Midterm</td>
<td>100</td>
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<tr>
<td>Final Exam</td>
<td>100</td>
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<tr>
<td>Research Paper</td>
<td>200</td>
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<tr>
<td>Peer Reviews (3 @ 20 points each)</td>
<td>60</td>
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<tr>
<td>Participation</td>
<td>40</td>
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<td>TOTAL</td>
<td>400</td>
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Schedule

Week 1 - Introduction to Ecological Anthropology
Week 2 - African forager behavioral ecology
Week 3 - African forager behavioral ecology
Week 4 - Cooperation and evolutionary game theory
Week 5 - Agriculture, demographic growth, and societal collapse
Week 6 - Systems, regulation, and adaptation
Week 7 - Ritual regulation in the tribal world
Week 8 - Resilience of coupled human-natural systems
Week 9 - Traditional ecological knowledge: swidden and rice cultivation in the Tropics
Week 10 - Coupled systems: The subaks of Bali
Week 11 - Coupled systems: The subaks of Bali
Week 12 - Anthropology and Complexity (Thanksgiving)
Week 13 - Political Ecology
Week 14 - Consumerism and Values
Week 15 - Complexity in Urban Systems
Week 16 - Exam Week

Moran c1-4
Moran c7 ; Lee c1-2, c4;
‘Meat Fight” film in class
Lee c5, c8; Weissner 2009
Hardin 1968, 1998; Monibot 1994; Sigmund 1993;
Roughgarden 2006
dictator game in class
Diamond 1995;
Shennan et al. nd;
Kennett et. al, 2012
Peer review workshop #1
Crutzen 2002;
Lovelock 1990;
Ward 2009
Rockstrom 2009;
NetLogo Daisyworld ABM
Rappaport 1967
Wilk 1981; Lansing 2006
Chapin 2009;
Lansing (Forward to 2nd Edition or P&P)
In-class Midterm Exam
Moran c9; Geertz 1963;
Downey 2010
Peer review workshop #2
Lansing c3-5;
NetLogo subak ABM
Lansing 2003;
Lansing and Downey (2011)
Lansing c6; Helmreich 1999; Lansing 2000
Sahlins 1994; Scott 1998
Moran c10; Betancourt and West 2010;
Redman 2004; Essays due
In-class Final Exam
Additional Readings


Research Papers

The goal is for you to learn how to write an excellent research paper. You’ll write a 10-12 page paper, following a carefully designed plan. Please read these instructions very carefully. In a series of steps, you are going to evaluate the relevant arguments presented in the assigned readings, do some additional research, write a draft, gather critical feedback and finally write a research paper. You will also learn how to evaluate other student’s papers and presentations. I guarantee that if you follow this plan carefully, you will gain valuable skills.

Paper topics: Analyze a Coupled Human and Natural System (CHNS, or human social interaction with a defined environment), creatively applying two or more analytical perspectives from those we are studying (systems ecology, resilience, complexity, behavioral ecology, game theory, political ecology). What is most interesting about this interaction?

Suggestions: This open-ended assignment challenges you to discover, through your own reading and research, a really interesting CHNS, and to see what makes it tick. A few examples: cooperation between humans and dolphins; the role of resources provided by grandmothers in human evolution; the role of the Dreamtime in Mardu firestick farming or Australian aboriginal land claims; human adaptation to ENSO in Borneo or Peru; the dynamics of Green Revolution agriculture at some site; the effects of structural adjustment policies on livelihoods in West Africa; the resilience of UNESCO world heritage programs. These examples are meant to suggest the range of interesting
possibilities that would be good choices for this assignment. Your task is to find a question that interests you, do some research to find out what is known about it, modify the topic as you learn more, and then write up your paper proposal. Be patient, keep looking until you find a question that really interests you, then dive in.

**Steps to completion of the research papers**

1. Write a full page proposal for your paper as follows:
   
   **Title of the proposed paper**
   
   **Your full name**
   
   One paragraph describing the question you want to investigate
   
   Second paragraph describing the sources you plan to use

   Bring this to class and hand it in before the first class meeting of **Week 5**. You will join a small group of 3 students, who will read one another’s proposals and offer suggestions for improvement. See suggestions for researching and structuring your paper on the wiki “Library research tools”.

2. Revise your proposal and hand it in before the first class meeting of **Week 6**.

3. After I return your proposal with comments, start working on a rough draft of the paper.

Use these subheadings, unless for some reason others are more appropriate:

**Title**

*Your full name and email address; date*

**Introduction:** 1-2 paragraphs describing the CHNS that is the topic of the paper, the question to be investigated and the analytical methods that will be used.

**Background and Significance:** why this question is interesting

**Description of the CHNS:** in as much detail as needed, describe the CHNS you are investigating

**Analysis:** analyze the particular aspect of the CHNS using one of the analytical methods we have studied.

**Conclusion:** Summarize what your analysis revealed.

**References:** List your references; see below for instructions

4. For the first meeting of **Week 10** bring a 5-8 page draft of the paper to class. Once again, you will join a small group of 3 students for a peer review of the papers. You will read and make comments on three papers, and you’ll receive written reviews and suggestions from 3 students for your own paper. Importantly, the peer reviews will be graded. Read yours carefully and use the comments to help you revise your own paper. Make sure to keep all three of them, to hand in.

5. Before the first class of **Week 11**, hand in these documents:
   
   a) your original paper proposal
b) your revised paper proposal with comments  
c) the first rough draft of your paper  
d) the peer review comments sheets from 3 students  
e) the revised draft of your paper  

Organize these documents in a stack, with the original proposal on the bottom and the latest draft on top. Staple the bundle together. But don’t put it into a folder. We will offer suggestions for revisions, and assign a temporary grade that will not be recorded (it’s just to let you know how well you’re doing). Follow our suggestions and those of your peers to prepare the final draft of the paper. Feel free to come to office hours for more help, use the Library Research Tools on the wiki, and visit the Writing Center.

6. On **Week 15**, hand in the final draft. It will be graded as a finished product, with few additional comments. (The idea is to give you lots of helpful feedback while you are working on the paper, and there is still time to improve it).

**FORMATTING**

All papers should be typed, spaced 1.5 (one and a half) with 12 point font and standard margins. Indicate the source of all quotations, using this APA format:

**IN-TEXT CITATION**

Yanovski and Yanovski (2002) reported that “the current state of the treatment for obesity is similar to the state of the treatment of hypertension several decades ago” (p. 600).

**LIST OF REFERENCES**


Be sure to place quotation marks around direct quotations. Remember that the university has strict rules about plagiarism, and will not accept the excuse that a student was unaware of these rules. But how are you to know the rules? We will talk about this in class, and also urge you to talk with the teaching assistant if you have unanswered questions. For general suggestions on sources and bibliography, see [http://www.dianahacker.com/resdoc/social.html](http://www.dianahacker.com/resdoc/social.html)

**Classroom Participation**

Periodically throughout the course (and on no particular schedule) I will pass around a sign-in sheet which will count towards classroom participation.

**Undergraduates**

Students in this course are assumed to basic concepts in evolution and natural selection. Acceptable pre-prerequisites are ANTH 222, ANTH 220 or equivalent. If you have not taken one of these courses you may still take the course with permission from the instructor.
Proper Citation and plagiarism

Plagiarism of any kind will not be tolerated and will result in a failing grade for the course. Provide citations for everything. Credit directly quoted and paraphrased words of others as well as sources of information. This includes internet sources as well.

If you have any questions about proper citation, please refer to the library help page or ask me:
http://www.lib.umd.edu/ues/guides/citation-tools

The UMD Code of Academic Integrity can be viewed online
http://www.president.umd.edu/policies/iii100a.html

Incompletes

Incompletes should be reserved for extreme emergencies that prevent the completion of course assignments toward the end of a school semester. It is very difficult to make up course assignments from a previous semester once a new semester begins, and students are often not able to prevent an Incomplete grade from lapsing into an F before the assigned deadline. If you think it is necessary to apply for an Incomplete grade due to an end of semester emergency, please contact the instructor immediately to arrange for a new submission date for the incomplete work and to fill out the proper paperwork. The instructor reserves the right to refuse an Incomplete grade to any student.

Late assignments

Late assignments will only be accepted under extreme circumstances, and if accepted, will be subject to point deductions at the instructor’s discretion. Always alert the instructor ahead of time if you think that you may not be able to submit an assignment on time.

Special Needs

If any student has any special study or test-taking needs (e.g., test anxiety, dyslexia, poor vision or hearing, special seating requirements, etc.), please let me know as soon as possible so that we can make your participation in this course a rewarding one. In addition, I will make students aware of special services/facilities on this campus that might be of assistance in the course of your studies here at UMCP including Disability Support Services (http://www.counseling.umd.edu/DSS/) and the University Counseling Center (http://counseling.umd.edu).

Religious Observance
Effort will be made to avoid scheduling assignments with major religious holidays. However, it is the student's responsibility to inform the instructor of any intended absences for religious observances other than those listed on the UMD website in advance (http://www.faculty.umd.edu/teach/attend_student.html#religious). Prior notification via the ELMS Messaging is required by the end of the second week of class.

Copyright

All course materials (presentations, exams, handouts, labs, etc. in digital or paper format) are subject to copyright protection and may only be used for personal use. Course materials must not be distributed without permission of the instructor.