

ANTH 4186/6186: Human Ecology (3 units)

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Office Hours: 1:30-2:30 PM Mon & Wed
Course Time: 9:10-10:30 PM

COURSE DESCRIPTION

Anthropology is the discipline concerned with the scientific analysis of the human experience. Ecology is the scientific study of organisms' webs of interaction with each other and their environment. As such, a course on Human Ecology concerns how the human experience both shapes and is shaped by one's ecology. Historically there have been longstanding debates about where and how humans fit within the living world and their environment. How do we relate with nature? How do environmental changes affect both our biology and culture? How do our beliefs and actions impact natural resources and alter ecological systems? And of course, how does access to or contests over natural resources affect how human populations interact with each other? These are just a few of the major questions that we will examine throughout the semester. This course provides an anthropological perspective on the relationship between culture and the environment (the biotic, a-biotic, and social worlds). Theories of ecological anthropology will be evaluated in light of varying biotic, a-biotic, and social conditions and through ethnographic case studies. We will focus on current problems facing the developing world and home.

COURSE OUTCOMES

- 1) Describe relationships between local environments, cultural beliefs, and behavior.
- 2) Critically evaluate anthropological theories of human-environment relationships.
- 3) Demonstrate knowledge of major environmental issues facing contemporary human populations.
- 4) Apply the concepts and methods developed from this class to evaluate contemporary world issues concerning environmental sustainability and social/ecological justice.

TEXTS (required)

Borgerhoff-Mulder, Monique and Peter Coppollilo

2005 *Conservation: Linking Ecology, Economics, and Culture*. Princeton University Press: Princeton, NJ.

Moran, Emilio F.

2008 *Human Adaptability: An Introduction to Ecological Anthropology*. Westview Press: Boulder, CO.

EVALUATION

Critical Readings (2 x 10 pts. each)	20 points
Quizzes (3 x 30)	90 points
Final Group Project Paper	50 points
Final Group Project Presentation	40 points
(Graduate Students Annotated Bibliography)	(20 points)
TOTAL Undergraduate Students	200 points
TOTAL Graduate Students	220 points

EXAMS Exams consist of definitions, true/false, multiple choice and short-answer essay questions. Exams are based upon lecture notes, in class discussion, class readings, and movies. Make-ups are not allowed unless approved by the instructor.

CRITICAL READING ASSIGNMENT Students are responsible for handing in TWO (2), one-page documents (margins 1 inch on all sides; 12-point font, single-spaced) that summarize a supplementary reading containing a "*" next to it. These readings can be found by looking below. Bibliographies should be included if necessary. Critical reading assignments will be graded on the students' ability to: 1) identify the article's key terminology, theoretical orientation, and methods employed to construct knowledge; 2) identify how other theoretical frameworks and methods might lead to different conclusions; 3) explore possible future directions for research; and 4) write concisely and in a grammatically correct format (in English).

Supplemental Readings

*Alvard, Michael

2003 The Adaptive Nature of Culture. *Evolutionary Anthropology* 12:136-149.

*Bodin, Orjan & Beatrice I. Crona,

2009 The role of social networks in natural resource governance: What relational patterns make a difference? *Global Environmental Change* 19:366-374.

*Charnley, Susan & William H. Durham

2010 Anthropology and Environmental Policy: What Counts? *American Anthropologist* 112(3):397-415.

*Cook, John H. & Stamati J. Cook

1988 Tibetan polyandry: problems of adaptation and fitness. In *Human Reproductive Behavior: A Darwinian Perspective*, L. Betzig, M. Bergerhoff-Mulder, and P. Turke (Eds.). Pp. 97-114. Cambridge University Press: Cambridge.

*Fahmi, Wael S. and Keith Sutton

2006 Cairo's Zabaleen Garbage Recyclers: Multi-nationals' Takeover and State Relocation Plans. *Habitat International* 30:809-837

*Grenade, Rebecca de

2013 Date palm as a keystone species in Baja California peninsula, Mexico oases. *Journal of Arid Environments* 94:59-67.

Kuznar, Larry

2008 *Reclaiming a Scientific Anthropology*. 2nd Ed. AltaMira Press: New York.

Laland, Kevin and Gillian Brown

2006 Cultural Niche Construction, Human Behavior, and the Adaptive Lag Hypothesis. *Evolutionary Anthropology* 15:95-104.

*Lansing, Steven

2003 Complex Adaptive Systems. *Annual Review of Anthropology* 32:183-204.

Macfarlan, S.J.

2012 Political Ecology of the Sierra de la Giganta Oases. *Anthropologies* 15.

<http://www.anthropologiesproject.org/2012/11/political-ecology-of-sierra-de-la.html>

*Macfarlan, S.J., M. Remiker, and R.J. Quinlan

2012 Competitive Altruism Explains Labor Exchange Variation in a Dominican Village. *Current Anthropology*. 35(1):118-124.

Nanda, Serena & Richard L. Warms

- 2012 *Culture Counts: A Concise Introduction to Cultural Anthropology*. Wadsworth Cengage: Belmont, CA.
- *Smith, Eric. A. & S. Abigail Smith
1994 Inuit Sex-Ratio Variation: Population Control, Ethnographic Error, or Parental Manipulation? *Current Anthropology* 35(5):595-624.
- Stone, Linda
2014 *Kinship and Gender: An Introduction*. 5th Ed. Westview Press: Boulder, CO.
- UNMDG
2014 <http://www.un.org/millenniumgoals/environ.shtml>
- *Yung, Laurie & Jill M. Belsky
2007 Private property rights and community goods: Negotiating landowner cooperation amid changing ownership on the Rocky Mountain front. *Society and Natural Resource Management* 20:689-703.

FINAL PROJECT Students are responsible for performing a group research project concerning a human ecology problem, broadly construed. The project will be motivated by the theories and major world environmental problems presented during the course. Students will: 1) locate an ecological anthropology problem; 2) identify explanations offered by researchers as to why it exists; 3) identify a population who locally is experiencing this problem first-hand and the solutions they have created to accommodate the problem; 4) identify and interview an organization that is attempting to solve or understand the problem locally or globally; 5) discuss the merits to current solutions offered by the population and organization; and 6) identify how other theoretical frameworks might conflict or complement the solutions offered by the population and organization. Students will develop a power-point presentation on the ecological anthropology related topic and will be given 15 minutes to present the power-point on one class period during the last week of class. Students will be given 5 minutes to answer questions from the audience (i.e. other students and myself). Additionally, they will be responsible for an approximately eight-ten page write-up of the project in an academic style format (Abstract, Introduction to the Problem, Previous Research, Organization Attempting to Solve/Understand Problem, Discussion/Conclusion). The organization of the paper should mimic the structure of the power-point.

GRADUATE-STUDENTS: ANNOTATED BIBLIOGRAPHY Graduate-students are responsible for handing in an annotated bibliography of no less than 15 academic sources related to the final group project. If two graduate-students work together, they are responsible for 30.

ADA STATEMENT The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. (www.hr.utah.edu/oeo/ada/guide/faculty/)

FACULTY & STUDENT RESPONSIBILITIES All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. Students have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests,

plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Code carefully and know they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

COURSE OUTLINE

Week	Primary Topics Covered
1	<p>1/13 Course Goals, Your Instructor, & Student Goals READ: Kuznar (2008) Chapter 1</p> <p>1/15 Philosophy of Science & Scientific Reasoning READ: Stone (2014) Chapter 1 READ: Nanda and Warms (2012) Chapter 5</p>
2	<p>1/20 The Anthropological Toolkit: Culture, Social Institutions, & Subsistence READ: Moran Chapters 1 & 3</p> <p>1/22 Ecological Anthropology Tools: Biomes, Stressors, & Adaptations READ: Moran Chapter 2</p>
3	<p>1/27 Some History of Ecological Anthropology READ: UNMDG (2014) READ: Borgerhoff-Mulder & Coppelillo Chapters 1 & 2</p> <p>1/29 Major Environmental Problems & Some Initial Solutions READ: Borgerhoff-Mulder & Coppelillo Chapter 3 READ: Moran Chapter 4</p>
4	<p>2/3 The Scale & Level of Analysis, Adaptive Management, Conservation Biology Discuss Final Group Project & Choose A Topic</p> <p>2/5 Quiz # 1 READ: Lansing (2003) READ: Alvard (2003)</p>
5	<p>2/10 Adaptive Systems READ: Borgerhoff-Mulder & Coppelillo Chapter 4 READ: Grenade (2013)</p> <p>2/12 Traditional Ecological Knowledge DUE: Critical Reading Assignment I READ: Borgerhoff-Mulder and Coppelillo Chapter 5</p>
6	<p>2/17 Human Behavioral Ecology READ: Laland & Brown (2004)</p> <p>2/19 Niche Construction READ: Borgerhoff-Mulder and Coppelillo Chapter 6</p>
7	<p>2/23 Commons & Cooperation READ: Borgerhoff-Mulder & Coppelillo Chapter 7 READ: Charnley & Durham (2010)</p> <p>2/25 Political Ecology READ: Yung & Belsky (2007) READ: Bodin, Crona, & Ernston</p>
8	<p>3/3 Networks & Cross-Boundary Cooperation READ: Borgerhoff-Mulder and Coppelillo Chapters 8-10</p>

	3/5 Solutions to Problems
9	3/10 Quiz II READ: Moran Chapter 7 READ: Macfarlan (2012) 3/12 Arid Biomes READ: Moran Chapter 5 READ: Smith & Smith (1994)
10	Spring Break: No Classes
11	3/24 Arctic Biomes 3/26 Movie: Nanook of the North READ: Moran Chapter 6 READ: Cook & Cook (1988)
12	3/31 High Altitude Biomes 4/2 Movie: The Dragon Bride READ: Moran Chapter 9 READ: Macfarlan, Remiker, & Quinlan (2012)
13	4/7 Humid Tropics READ: Moran Chapter 8 4/9 Grassland Biomes READ: Moran Chapter 10 READ: Fahmi & Sutton (2006)
14	4/14 Urban Environments: Movie Garbage Dreams DUE: Critical Reading Assignment II 4/16 Quiz III
15	Student Presentations
16	Student Presentations
17	May 5: Final Group Paper Due