

**Anth 4111 Ecological and Environmental Anthropology
Winter 2019**

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|--------------|--------------------|-----------|--|
| Instructor | Dr. Scott Hamilton | Lecture | mon/wed 1:00-2:30 pm |
| Office | BB0007, BB2001B | Classroom | BB2002 |
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This course explores the integration of human beings into complex ecosystems. It is primarily theoretical in focus, and provides a historical context for the development of North American Environmental Anthropology (the study of the human/environment relationship). It offers a 'history of ideas'- the debate whether the environment has an impact upon cultural expression and evolution, and if so, how determinative is it?

Students **MUST** keep up in the readings and contribute to the class discussions. This course seeks to prepare senior undergraduates for the expectations of graduate school. Written assignments must be typed, well-argued, represent original content that reflects your perspective and not merely a paraphrasing of the readings. You must develop ability and self-confidence to ask questions, critically comment, and offer debate in class. A proportion of the final grade will be determined by class participation.

Late papers are strongly discouraged. If you are ill or have other valid reasons for a late assignment, contact the instructor immediately to seek permission to turn it in late. Without permission, after 1 day late papers will have points deducted at the rate of 1 point per day. Papers that are overdue by more than one week (without an extension) will not be graded.

The first 2/3 of the course will be predominately lectures and discussion, with the latter portion focusing upon students' presentations. Grading is as follows.

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|------------------------|-----------|-----|
| Mid term Test | | 20% |
| 'Encyclopedia' entries | (4 * 10%) | 40% |
| Seminar presentation | | 15% |
| Class participation | | 5% |
| Final paper | | 20% |

Each student will produce 4 brief essays of between 200 and 300 words each. These essays should be styled as an encyclopedia entry that offers a brief and focused summary of the contribution of a specific scholar, or the nature and implications of an intellectual school of thought that is discussed during the term. They must be well-crafted and intended to inform a casually interested reader about the issue or person addressed. An example will be presented in class to review my expectations. These brief papers will be due at three-week intervals, and can encompass any aspect of the class materials. Students are expected to do secondary reading and cite their sources (at least 2) for each entry.

In the final third of the term, each student will make a (ca. 30 minute) presentation. It can be a new topic or amplification of one of your encyclopedia entries. It might be a case study illustrating a theoretical orientation in action. By week 8 students should have identified a paper topic, informed the instructor of that topic, and received approval to proceed with it. I do not assign a text book, but students are expected to do the secondary readings.

Optional Text

Kaplan, David and Robert A. Manners
1986 **Cultural Theory** Waveland Press, Prospect Heights.

Week 1 (Jan 7, 9)

Introduction to Course

The Historic Origins of Environmental Anthropology

Early Environmental Determinism and the European Enlightenment

The Age of Exploration, Charles Darwin and the Concept of Natural Selection

Readings: Kaplan and Manners Ch 1, pp 32-38

Week 2 (Jan 14, 16)

Social Darwinism and Herbert Spenser

Unilineal Social Evolution (E.B. Tylor and L. H. Morgan)

“Savagery, Barbarism and Civilization”

Readings: Kaplan and Manners Ch 1, pp 38-43
L.H. Morgan “Ethnical Periods”

Week 3 (Jan 21, 23)

Early 20th Century Anthropology

Boas and the rejection of the environmental focus

The British Structural/Functionalists

Leslie White and “energy capture”

Julian Steward and Cultural Ecology

Readings: Kaplan and Manners pp 43-45
F. Boas “The Limitations of the Comparative Method”
Leslie White “Energy and the Evolution of Culture”

Week 4 (Jan 28, 30)

Karl Marx, Friedrich Engels and Historical Materialism

Neo-Evolutionary Social Theory

Just what role does the environment have in influencing cultural expression?

The ‘Environment’ as a ‘relative’ cultural construct.

Readings: Kaplan and Manners pp 46-48, 75-87,
J. Steward “The Concept and Method of Cultural Ecology”
“Cultural Causality and Law”

Week 5 (Feb 4, 6)

New Directions in Environmental Anthropology

The 1960’s and Ecosystem Studies

Ecosystem and Environment: Borrowing of biological terms?

What is an Ecosystem, how do you define and demarcate it?

Systems Theory: Is it really a theory?

How do human ecosystems differ from “natural” ones? (Butzer)

New Directions in Ecological Anthropology (across space and through time)

Readings: Salmon 1978
Butzer in Moran
Lees and Bates “The Ecology of Cumulative Change”
Gross “Ecosystems and Methodological Problems in Ecological Anthro”
Winterhalder 1984

Week 6 (Feb 11, 13)

Conceptual and operational weaknesses of General Systems Theory

Diachronic applications of GST (Kent Flannery)

Marvin Harris and Cultural Materialism

Readings Kaplan and Manners pp 91-101
Flannery “Archaeological Systems Theory and Early MesoAmerica”
Harris “Theoretical Principles of Cultural Materialism”
“Cows, Pigs, Wars and Witches”

Feb 18 to 22 Fall Study week (No classes)

Week 7 (Feb 25, 27) **Mid Term Test**

Three types of ecosystem analysis

- comparative (Murphy and Steward)
- cross-sectional
- longitudinal

Synchronic Models of Environmental Anthro

Boreal Forest adaptation systems

Foragers manipulating and changing their environment (fire ecology).

Readings Gross “Ecosystems and Methodological Problems in Ecological Anthro”

Thomas 1973

Tanner 1978

Feit 1978

Week 8 (Mar 4, 6)

Economic Anthropology and the debate between the Formalists and the Substantivists

Humans as rational calculators

Altruism and its role in understanding social behaviour

Mathematical Modeling of Human Behaviour: Optimal Foraging and Linear Programming

Readings: Winterhalder 1983

Moore and Keene 1983 ch 6

Week 9 (Mar 11, 13)

American Archaeology: The growing Ecological Emphasis

-The Speculative Period (1492-1840)

-The Classificatory-Descriptive Period (1840-1914)

-The Classificatory-Historical Period (1914-1940)

Readings: Willey and Sabloff Ch 2, 3, 4

Week 10 (Mar 18, 20)

American Archaeology cont'd

-The Classificatory-Historical Period cont'd (1940-1960)

- The Modern Period (1960-present) Processualism and the Environmental Focus

Readings: Willey and Sabloff Ch 5, 6

Flannery “Archaeology with a capital S”

Student Seminar presentations or case study

Week 11 (Mar 25, 27)

Student Seminar presentations

Week 12 (Apr 1, 3)

Student Seminar presentations

Readings List

Anderson, James N.

1973 “Ecological Anthropology or Anthropological Ecology” In **Handbook of Social and Cultural Anthropology** edited by J.J. Honigmann, pp 179-239 Rand McNally, Chicago.

Applebaum, Herbert (ed)

1987 **Perspectives in Cultural Anthropology** State University of New York Press, Albany

Barth, F.

1956 “Ecological relationships of ethnic groups in Swat, North Pakistan, **American Anthropologist** 58: 1079-1089

Bennett, John W.

1976 **The Ecological Transition: Cultural Anthropology and Human Adaptation** Pergamon Press, New York

Bertalanffy, L. von

1950 “The Theory of Open Systems in Physics and Biology” **Science** vol 111, - pp23-29

- 1969 **General System Theory** Braziller,
New York.
- Bettinger, R.L.
1987 "Archaeological Approaches to Hunter-
Gatherers" **Annual Review of
Anthropology** 16: 121-142.
- Binford, L.R.
1962 "Archaeology as anthropology"
American Antiquity 28:217-215.
- 1965 "Archaeological Systematics and the
study of culture process" **American
Antiquity** 31: 203-210.
- 1967 "Smudge pits and hide smoking: the use
of analogy in archaeological reasoning"
American Antiquity 32:1-12
- 1977 (ed) **For Theory Building in
Archaeology** Academic Press, New York.
- 1978 **Nunamiut Ethnoarchaeology**
Academic Press, New York.
- 1981 **Bones: Ancient Men and Modern
Myths** Academic Press, New York.
- 1987 "Data, relativism and archaeological
science" **Man** 22: 391-404.
- Binford, L.R. and J.A. Sabloff
1982 "Paradigms, systematics, and
archaeology" **Journal of Anthropological
Research** 38: 137-153.
- Binford, S.R. and L.R. Binford (eds)
1968 **New Perspectives in Archeology**
Aldine, Chicago.
- Bishop, C.A.
1974 **The Northern Ojibwa and the Fur
Trade: An Historical and Ecological
Study** Holt, Rinehart and Winston of
Canada, Toronto
- 1986 "Territoriality among Northeastern
Algonquians" **Anthropologica** 28 (1-2) 37-
63
- Boas, F.
1896 "The Limitations of the Comparative
Method of Anthropology" **Science** 4 no 103
reprinted in P. Bohannon and M Glazer
High Points in Anthropology 2nd edition,
Alfred A. Knopf, New York.
- Bohannon, P. and M. Glazer (ed)
1988 **High Points in Anthropology** Alfred
A. Knopf, New York
- Burley, D.V. and S. Hamilton
1990 "Rocky Mountain Fort: Archaeological
Research and the Late 18th Century North
West Company Expansion in British
Columbia" **BC Studies** no 88 winter pp 3-
20
- Carneiro, Robert L.
1970 "A theory of the origin of the state"
Science 169: 733-738
- Cohen, M.N.
1977 **The Food Crisis in Prehistory** Yale
University Press, New Haven.
- Conkey, M.W. and J.D. Spector
1984 "Archaeology and the study of gender"
**Advances in Archaeological Method and
Theory** 7: 1-38.
- Cook, S.
1966 "The obsolete 'anti-market' mentality: a
critique of the substantive approach to
economic anthropology" **American
Anthropologist** 68: 323-345.
- Cox, Bruce
1978 **Cultural Ecology** Macillian Co of
Canada
- Dalton, G.
1961 "Economic theory and primitive
society" **American Anthropologist** 63: 1-
25.
- Deagan, K.
1982 "Avenues of inquiry in historical
archaeology" In **Advances in
Archaeological Method and Theory** 5:
151-177
- Dunnell, R.C.
1980 "Evolutionary theory and archaeology"
**Advances in Archaeological Method and
Theory** 3: 35-99.

- Feit, H.
1978 "The Ethno-Ecology of the Waswanipi Cree: or How Hunters Can Manage Their Resources" in **Cultural Ecology** edited by Bruce Cox Macmillan Co of Canada
- Flannery, K.V.
1968 "Archaeological Systems Theory and Early Mesoamerica" in **Anthropological Archaeology in the Americas** edited by B.J. Meggers Anthropological Society of Washington, Washington, DC, pp 67-87
- 1972 "The cultural evolution of civilizations" **Annual Review of Ecology and Systematics** 3: 399-426.
- 1973 "The Origins of Agriculture" **Annual Review of Anthropology** 2:271-310, reprinted in **The Early Mesoamerican Village** edited by K.V. Flannery, Academic Press
- 1973b "Archaeology with a Capital S" In **Research and Theory in Current Archaeology** edited by Charles L Redman John Wiley and Sons, Toronto.
- 1976 **The Early Mesoamerican Village** edited by K.V. Flannery Academic Press
- Gibbon, G.
1984 **Anthropological Archaeology** Columbia University Press, New York
- Goudie, Andrew
1981 **The Human Impact: Man's Role in Environmental Change** Basil Blackwell, Oxford
- Geertz, C.
1963 **Agricultural Involution: The Processes of Ecological Change in Indonesia** University of California Press, Berkeley
- Gross, D.R.
1990 "Ecosystems and Methodological Problems in Ecological Anthropology" in E. F. Moran (ed) **The Ecosystem Approach in Anthropology** University of Michigan Press, Ann Arbor
- Hallpike, C.R.
- 1986 **The Principles of Social Evolution** Clarendon Press, Oxford
- Hamilton, S.
1993 "Over-hunting and Local Extinctions: Socio-Economic Implications of Fur Trade Subsistence" in **Culture and Environment: A Fragile Coexistence** edited by R.W. Jamieson, S. Abonyi and N.A. Mirau 24th Chacmool Conference, University of Calgary, Calgary.
- Hardesty, Donald L.
1977 **Ecological Anthropology** John Wiley and Sons, New York
- Harris, Marvin
1968 **The Rise of Anthropological Theory** Thomas Y. Crowell Co, New York
- 1974 **Cows, Pigs, Wars and Witches: The Riddles of Culture** Vintage Press, New York
- 1980 "Theoretical Principles of Cultural Materialism" in **Cultural Materialism: The Struggle for a Science of Culture**, Vintage Books, New York
- Helm, June
1962 "The Ecological Approach in Anthropology" **American Journal of Sociology** 67:630-639.
- 1968 "The Nature of Dogrib Socioterritorial Groups" in R.B. Lee and I De Vore (ed) **Man the Hunter** Aldine Press, Chicago, pp 118-125
- Hickerson, Harold
1965 "The Virginia Deer and Intertribal Buffer Zones in the Upper Mississippi Valley" in A. Leeds and A.P. Vadyda **Man, Culture and Animals, the Role of Animals in Human Ecological Adjustments** Publication 78, American Association for the Advancement of Science, pp 43-65, Washington.
- 1988 **The Chippewa and Their Neighbors: A Study in Ethnohistory** revised and expanded edition, Waveland Press, Prospect Heights

- Hodder, Ian
1985 "Postprocessual archaeology"
Advances in Archaeological Method and Theory 8: 1-26
- 1986 **Reading the Past: Current approaches to interpretation in archaeology** Cambridge University Press, Cambridge.
- 1992 **Theory and Practise in Archaeology** Routledge, New York
- Jochim, Michael
1979 "Breaking down the system: Recent ecological approaches in archaeology"
Advances in Archaeological Method and Theory edited by M. Schiffer, Academic Press, New York, 2: 77-177
- Kaplan, D. and R.A. Manners
1972 **Culture Theory** Waveland Press, Prospect Heights
- Keegan, W.
1986 "The Optimal Foraging Analysis of Horticultural Production" **American Anthropologist** 88:92-107
- Keene, A.S.
1981 **Prehistoric Foraging in a Temperate Forest: A Linear Programming Model** Academic Press, Toronto.
- Knudtson, P. and D. Suzuki
1992 **Wisdom of the Elders** Stoddart Publishing Co., Toronto
- Lee, R.B. and I. DeVore
1968 **Man the Hunter** Aldine Publishing Co, Chicago
- Lees, S.H. and D.G. Bates
1990 "The Ecology of Cumulative Change" in **The Ecosystem Approach in Anthropology** edited by E. Moran University of Michigan Press, Ann Arbor.
- Leone, M.P.
1986 "Symbolic, Structural, and Critical Archaeology" in **American Archaeology Past and Future** edited by D. Meltzer et al Smithsonian Institution Press, Washington, DC.
- Leone, M.P. and P. B. Potter (ed)
1988 **The Recovery of Meaning Historical Archaeology in the Eastern United States** Smithsonian Institution Press, Washington
- Leone, M.P., P.B. Potter jr, and P.A Shackel
1987 "Toward a critical archaeology"
Current Anthropology 28: 283-302.
- Little, M.A. and G. Morren, jr.
1976 **Ecology, Energenics and Human Variability** Wm. C. Brown Publishers, Dubuque, Iowa
- McGee, R. Jon and Richard L. Warms
1996 **Anthropological Theory: An Introductory History** M ayfield publishing, Toronto.
- McIntosh, R.P.
1985 **The Background of Ecology: Conecept and Theory** Cambridge University Press, Cambridge.
- Moore, J.A. and A.S. Keene (ed)
1983 **Archaeological Hammers and Theories** Academic Press, Toronto.
- Moran, Emilio F. (ed)
1982 **Human Adaptability: An Introduction to Ecological Anthropology**, Westview Press, Boulder
- 1990 **The Ecosystem Approach in Anthropolgy From Concept to Practise** University of Michigan Press, Ann Arbor.
- Morgan, Lewis Henry
1964 "Ethnical Periods" **Ancient Society** edited by L.A. White The Belknap Press of Harvard University Press, Cambridge.
reprinted in P. Bohannan and M Glazer
High Points in Anthropology 2nd edition, Alfred A. Knopf, New York.
- Morris, Freilich
1967 "Ecology and Culture: Environmental Determinism and the Ecological Approach in Anthropology" **Anthropological Quarterly** 40: 26-43.
- Netting, Robert M.

- 1968 **Hill Farmers of Nigeria: Cultural Ecology of the Kofyar of the Jos Plateau** University of Washington Press, Seattle.
- 1973 "Fighting, Forest and the Fly: Some Demographic Regulators among the Kofyar" **Journal of Anthropological Research** 29: 164-179
- 1986 **Cultural Ecology** (2nd Edition), Waveland Press, Prospect Heights, Illinois.
- Odum, Eugene P.
1971 **Fundamentals of Ecology** 3rd edition W.B. Saunders Co, Toronto
- Orlove, Benjamin
1980 "Ecological Anthropology" **Annual Review of Anthropology** 9:235-273
- Raab, L.M. and A.C. Goodyear
1984 "Middle-range theory in archaeology: a critical review of origins and applications" **American Antiquity** 49: 255-268.
- Reichel-Dolmatoff, G.
19-- "Cosmology as Ecological Analysis: A view from the Rain Forest" **Man** (N.S.) II pp 307-318.
- Renfrew, Colin and Ezra W. Zubrow (ed)
1994 **The Ancient Mind: Elements of Cognitive Archaeology** Cambridge University Press, Cambridge.
- Rindos, David
1984 **The Origins of Agriculture: An Evolutionary Perspective** Academic Press, New York.
- 1989 "Undirected Variation and the Darwinian Explanation of Cultural Change" **Archaeological Method and Theory** Vol 1 edited by M.B. Schiffer, University of Arizona press, Tucson
- Rogers, E.S.
1983 "Cultural Adaptations: The Northern Ojibwa of the Boreal Forest 1670-1980" In **Boreal Forest Adaptations: The Northern Algonkians** edited by A.T. Steergman, Plenum Press.
- Rouse, I.B.
1986 **Migrations in Prehistory: Inferring Population Movement from Cultural Remains** Yale University Press, New Haven.
- Roy, Ellen
1982 **Environment, Subsistence and System** Cambridge University Press, Cambridge
- Sahlins, M.D.
1960 "Evolution: Specific and General" in **Evolution and Culture** University of Michigan Press, Ann Arbor, reprinted in P. Bohannon and M Glazer **High Points in Anthropology** 2nd edition, Alfred A. Knopf, New York.
- 1964 "Culture and Environment: The Study of Cultural Ecology" in Sol Tax (ed), **Horizons in Anthropology** Aldine Chicago, pp 132-147
- Salmon, M.
1978 "What Can Systems Theory do for Archaeology" **American Antiquity** 43:174-183
- Schrire, Carmel
1980 "An Inquiry into the Evolutionary Status and Apparent Identity of the San Hunter-Gatherers" **Human Ecology** 8:193-212
- Schalk, R.F.
1977 "The Structure of an Anadromous Fish Resource" in **For Theory Building in Archaeology** edited by I.R. Binford, Academic Press, New York
- Shanks, Michael and Christopher Tilley
1987 **Re-Constructing Archaeology: Theory and Practise** 2nd Edition, Routledge New York.
- Smith, Robert Leo (ed)
1976 **The Ecology of Man: An Ecosystem Approach** 2nd edition Harper and Row Publishers, New York
- Speck, Frank
1978 "The Family Hunting Band as the Basis of Algonkian Social Organization" in

- Cultural Ecology** edited by Bruce Cox
Macillan Co of Canada
- Steward, Julian H.
1936 "The Economic and Social Basis of
Primitive Bands" in **Essays on
Anthropology in Honor of Alfred Louis
Kroeber** University of Californian Press
Berkeley pp311-50
- 1949 "Cultural Causality and Law: A Trial
Formulation of the Development of Early
Civilizations" **American Anthropologist**
51:1-27 reprinted in Herbert Applebaum
(ed) **Perspectives in Cultural
Anthropology** State University of New
York Press, Albany
- 1955 "The Concept and Method of Cultural
Ecology" **Theory of Culture Change**
University of Illinois Press, reprinted in P.
Bohannon and M Glazer **High Points in
Anthropology** 2nd edition, Alfred A.
Knopf, New York.
- 1977 **Evolution and Ecology: Essays on
Social Transformation** edited by J.C.
Steward and R. F. Murphy, University of
Illinois Press, Chicago.
- Struever, S. and F. Antonelli Holton
1979 **Koster: Americans in Search of their
Prehistoric Past** Mentor Books,
Scarborough.
- Syms, E.L.
1977 "Cultural Ecology and Ecological
Dynamics of the Ceramic Period in
Southwestern Manitoba" **Plains
Anthropologist** Memoir 12 22-76 pt 2
- Tanner, Adrian
1978 "The Significance of Hunting
Territories Today" in **Cultural Ecology**
edited by Bruce Cox Macillan Co of
Canada
- 1989 **Bringing Home Animals** Social and
Economic Studies No 23, Memorial
University
- Thomas, D.H.
- 1973 "An Empirical Test for Steward's
Model of Great Basin Settlement Patterns"
American Antiquity 38:155-176
- Trigger, Bruce G.
1989 **A History of Archaeological Thought**
Cambridge University Press, Cambridge.
- Vayda, Andrew P.
1969 "An Ecological Approach in Cultural
Anthropology" **Bucknell Review** 17:112-
119
- Vayda, Andrew P. (ed)
1982 **Environment and Cultural Behavior**
(4th Printing) University of Texas Press
Austin
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1975 "New Directions in Ecology and Ecological
Anthropology" **Annual Review of Anthropology**
4:293-306.
- Vayda, A. and R.A. Rappaport
1968 "Ecology, Cultural and Noncultural" In
Introduction to Cultural Anthropology edited by J.
Clifton pp 477-497 Houghton Mifflin, Boston
- Watson, P.J., S.A. LeBlanc and C.L. Redman
1971 **Explanation in Archaeology: An Explicitly
Scientific Approach** Columbia University Press
- Wiener, N.
1961 **Cybernetics** 2nd ed. M.I.T. Press, Cambridge.
- Wiley, G.R. and J.A. Sabloff
1980 **A History of American Archaeology** 2nd
edition, Thames and Hudson, London
- Winterhalder, B and E.A Smith (ed)
1981 **Hunter-Gatherer Foraging Strategies:
Ethnographic and Archaeological Analyses**
University of Chicago Press, Chicago
- Winterhalder, B.
1983 "History and Ecology of the Boreal Zone in
Ontario" in **Boreal Forest Adaptations** edited by
A.T. Steegmann, Plenum Press, New York
1984 "Reconsidering the Ecosystem Concept"
Reviews in Anthropology 11(4):301-330.