

**ECOLOGICAL KNOWLEDGE AND
ENVIRONMENTAL SUSTAINABILITY**
Anthropology 399 (CRN 14070)
MWF 11:30 – 12:35

Dr. Jeremy Spoon
Phone: 503.725.9729
Email: jspoon@pdx.edu

Office: 141-Q
Office Hours: MW 1:30-2:30,
and by appointment

COURSE DESCRIPTION

This course focuses on the relevance of local/traditional/indigenous ecological knowledge to environmental sustainability. Ecological knowledge is the sum knowledge, spiritual values, and practices passed down from generation-to-generation about the environment. This knowledge often informs decision-making about natural resources, which may or may not be environmentally sustainable depending on many factors. Grounded in cultural anthropology, this course will engage various interdisciplinary theoretical and methodological tools to dynamically assess what ecological knowledge is and how it is transmitted and acquired by indigenous and other peoples. The course will connect these topics to the physical environment, critically examining how they may conserve biological diversity. We will also address on-going debates about the relevance of indigenous knowledge to contemporary resource management.

REQUIRED READINGS

All class materials are available on Blackboard (see below). You may either read these documents online or print a copy for personal use.

CLASS REQUIREMENTS

Students taking this course Pass/No Pass are required to earn at least the equivalent of a 'C-' to pass the class. Anthropology majors and minors must take the class for a grade. Student performance will be evaluated through bi-weekly reading journals (35%), a mid-term exam (30%), and a final paper (35%).

Illness, emergencies, and plagiarism

The H1N1 virus has spread through many colleges and universities across the country. If you feel ill (fever, sore throat, runny nose, headache, cough, aches), please stay home until you have been without fever for 24 hours without the use of fever-reducing medication. Let the instructor know about your illness. You will not be penalized for illness-related absences, and you will have the opportunity to make up missed assignments.

Late papers and exams will lose one letter grade for each day past due except in cases of severe illness or emergency. Requests for extensions on deadlines must be made in writing ahead of the due date. All work must be completed for students to receive a passing grade. Students with a documented disability needed accommodations in this course should inform the instructor immediately.

Plagiarism (intellectual theft) is a very serious offense and will not be tolerated. Any assignment containing plagiarized material will receive a failing grade. You are responsible for reading and understanding the department handout on plagiarism, available on Blackboard and the Anthropology Department website. Please let the instructor know if you have any questions about the policy.

Blackboard

The course syllabus, readings, reading journal format, discussion questions, service learning opportunities, and test questions will be available on Blackboard (<http://psuonline.pdx.edu/>). To login, you need an Odin login username and password. To get an Odin account, visit <https://www.account.pdx.edu>. Please contact the instructor if you have any difficulties using this resource.

Reading Journals (35%), due every two weeks

Students will turn in a reading journal every two weeks that summarizes and analyzes the weekly readings. The format will be posted on Blackboard. Reading journals will be evaluated using a credit/no credit format.

Take Home Exam I (30%)

This take home exam will focus on the readings from the first half of the course. Students will write two short (2 page) essays. The test questions, formatting, citation, and reference guidelines will be posted on Blackboard.

Take Home Exam II (35%)

This take home exam will focus on the readings from the second half of the course. Students will write two short (2 page) essays. The test questions, formatting, citation, and reference guidelines will be posted on Blackboard.

1. Anthropological Engagements with Culture and Place

September 28: Course Overview

September 30: Introduction to Environmental Anthropology I

Robbins, Richard H.

2008 Chapter 1: Culture and Meaning. *Cultural Anthropology: A Problem-Based Approach*. 4th edition. Pp. 1-36. Belmont, CA.: Thomson Wadsworth.

October 2: Introduction to Environmental Anthropology II

Townsend, Patricia K.

2000 *Environmental Anthropology: From Pigs to Policies*. Pp. 1-25. Prospect Heights, Illinois: Waveland Press.

2. Applied Ethical Research and the Environment

October 5: Why Focus on Ethics in Anthropology?

Smith, Linda Tuhiwai

1999 Introduction. *Decolonizing Methodologies: Research and Indigenous Peoples*. Pp. 1-17. London: Zed Books Ltd.

October 7: Human Rights and Research

American Anthropological Association Code of Ethics

<http://www.aaanet.org/committees/ethics/ethcode.htm>

International Society for Ethnobiology Code of Ethics

http://ise.arts.ubc.ca/global_coalition/ethics.php

Declaration on the Rights of Indigenous Peoples

<http://daccessdds.un.org/doc/UNDOC/LTD/N07/498/30/PDF/N0749830.pdf?OpenElement>

3. Indigenous Peoples and Place

October 9: Who Is Indigenous?

Please read in the following order:

Beteille, Andre

1998 The Idea of Indigenous People. *Current Anthropology* 39(2):187-191.

Childs, John Brown, and Guillermo Delgado

1999 On the Idea of the Indigenous. *Current Anthropology* 40(2):211-212.

Kuper, Adam

2003 The Return of the Native. *Current Anthropology* 44(3):389-395.

Asch, Michael, Colin Samson, Dieter Heinen, Justin Kenrick, Jerome Lewis, Sidsel Saugestad, and Terry Turner

2004 On the Return of the Native. *Current Anthropology* 45(2):261-265.

October 12: The Nature-Culture Dichotomy

Jelinski, Dennis E.

2005 There is No Mother Nature—There is No Balance of Nature: Culture, Ecology, and Conservation. *Human Ecology* 33(2):271-288.

Marten, Gerald G.

2003 Chapter 9: Perceptions of Nature. *Human Ecology: Basic Concepts for Sustainable Development*. Pp. 121-135. London: Earthscan.

4. Local Ecological Knowledge

October 14: Local Ecological Knowledge I

Berkes, Fikret

1999 Chapter 1: Context of Traditional Ecological Knowledge. *Sacred Ecology: Traditional Ecological Knowledge and Resource Management*. Pp. 3-15. Philadelphia: Taylor and Francis.

Turner, Nancy J., Marianne Boelscher Ignace, and Ronald Ignace

2000 Traditional Ecological Knowledge and Wisdom of Aboriginal Peoples in British Columbia. *Ecological Applications* 10(5):1275-1287.

October 16: Local Ecological Knowledge II

Kalland, Anne

2001 Indigenous Knowledge: Prospects and Limitations. *Indigenous Environmental Knowledge and its Transformations: Critical Anthropological Perspectives*. R. Ellen, Peter Parkes, and Alan Bicker, ed. Pp. 319-334. Sydney: Harwood Academic Publishers.

Maffi, Luisa

2005 Linguistic, Cultural, and Biological Diversity. *Annual Review of Anthropology* 29:599-617.

October 19: Ethnobiological Classification

Ellen, Roy

2006 Introduction. *Journal of the Royal Anthropological Institute*:S1-S22.

October 21: Ethnobiology and Food I

Klindienst, Patricia

2006 *Renewal: Four Sisters Garden and Monte Vista Farm. The Earth Knows My Name: Food, Culture, and Sustainability in the Gardens of Ethnic Americans*. Pp. 1-32. Boston: Beacon Press.

Film: Gathering Devah

October 23: Ethnobiology and Food II

Etkin, Nina L.

2007 Introduction. In *Edible Medicines: An Ethnopharmacology of Food*. Pp. 3-43. Tucson: University of Arizona Press.

5. Learning and Knowing in Indigenous Societies Today

October 26: Ecological Knowledge Transmission

Zent, Stanford

2009 Traditional Ecological Knowledge (TEK) and Biocultural Diversity: A Close-Up Look at Linkages, Delearning Trends, and Changing Patterns of Transmission. *Learning and Knowing in Indigenous Societies Today*. P. Bates, M. Chiba, S. Kube, and D. Nakashima, eds. Pp. 39-58. Paris: UNESCO.

October 28: Ecological Knowledge and Change

Bates, Peter

2009 Learning and Inuit Knowledge in Nunavut, Canada. *Learning and Knowing in Indigenous Societies Today*. P. Bates, M. Chiba, S. Kube, and D. Nakashima, eds. Pp. 95-106. Paris: UNESCO.

Wongbusarakum, Supin

2009 Loss of Traditional Practices, Loss of Knowledge, and the Sustainability of Cultural and Natural Resources: A Case of Urak Lawoi People in the Adang Archipelago, Southwest Thailand. *Learning and Knowing in Indigenous Societies Today*. P. Bates, M. Chiba, S. Kube, and D. Nakashima, eds. Pp. 73-86. Paris: UNESCO.

October 30: Ecological Knowledge and Change II

Ross, Norbert

- 2002 Lacandon Maya Intergenerational Change and the Erosion of Folk Biological Knowledge. *Ethnobiology and Biocultural Diversity: Proceedings of the Seventh International Congress of Ethnobiology*. J. R. Stepp, Felice S. Wyndham, and Rebecca K. Zarger, eds. Pp. 585-592. Athens, Georgia: The International Society of Ethnobiology.

Zarger, Rebecca K. and John R. Stepp

- 2004 Persistence of Botanical Knowledge among Tzeltal Maya Children. *Current Anthropology* 45(3):413-418.

November 2: Alternative Forums for Learning

Florey, Margaret

- 2009 Sustaining Indigenous Languages and Indigenous Knowledge: Developing Community Training Approaches for the 21st Century. *Learning and Knowing in Indigenous Societies Today*. P. Bates, M. Chiba, S. Kube, and D. Nakashima, eds. Pp. 25-38. Paris: UNESCO.

Sillitoe, Paul

- 2006 Ethnobiology and applied anthropology: rapprochement of the academic with the practical. *Journal of the Royal Anthropological Institute*:S119-S142.

6. Place-Based Spiritual Values

November 4: Spirituality and Place I

Film: Beyul—Sacred Hidden Valleys of the Himalaya

Grim, John A.

- 2001 Introduction. *Indigenous Traditions and Ecology: The Interbeing of Cosmology and Community*. Pp. xxxiii-lvii. Cambridge: Harvard University Press.

November 6: Review for Exam 1

November 9: Exam 1 Due (turn in at the beginning of class)

November 9: Beyul Khumbu: The Sherpa Example

Optional Reading

Spoon, Jeremy

- n.d. Tourism Meets the Sacred: The Case of the Khumbu Sherpa in Sagarmatha (Mount Everest) National Park and Buffer Zone, Nepal. Precious Earth: Nature, Culture, and the Sacred. Altamira Press.

Film: In the Light of Reverence

November 11: No Class (Veterans Day)

November 13: Spirituality and Place II

Catanoiu, Sebastian and Benedict Saucius

- 2008 The monastic area of Vanatori-Neamt Natural Park, Romania. Spiritual and Cultural Values of Protected Landscapes and Seascapes. J.M. Mallarach ed. Pp. 146-148. Geneva: The World Conservation Union.

Sarmiento, Fausto, Cesar Cotacachi and Lee Ellen Carter

- 2008 Sacred Imbakucha: intangibles in the conservation of cultural landscapes of Ecuador. Spiritual and Cultural Values of Protected Landscapes and Seascapes. J.M. Mallarach ed. Pp. 114-131. Geneva: The World Conservation Union.

Villfane, Danilo

- 2008 Caring for the 'Heart of the World', Colombia. Spiritual and Cultural Values of Protected Landscapes and Seascapes. J.M. Mallarach ed. Pp. 170-172. Geneva: The World Conservation Union.

7. Market Integration

November 16: Market Integration and Ecological Knowledge

Rigg, Jonathan

- 2006 Land, Farming, Livelihoods, and Poverty: Rethinking the Links in the Rural South. *World Development* 34(1):180-202.

Godoy, Ricardo, Victoria Reyes-Garcia, Elizabeth Byron, William R. Leonard, and Vincent Vadez

- 2005 The Effect of Market Economies on the Well-Being of Indigenous Peoples and on Their Use of Renewable Natural Resources. *Annual Review of Anthropology* 34:121-138.

Optional Reading

Reyes-Garcia, Victoria, Vincent Valdez, Elizabeth Byron, Lilian Apaza, William R. Leonard, Eddy Perez, and David Wilkie

- 2005 Market Economy and the Loss of Folk Knowledge of Plant Uses: Estimates from the Tsimane' of the Bolivian Amazon. *Current Anthropology* 46(4):651-656.

8. Ecological Knowledge and Sustainability-Social Sciences vs. Natural Sciences

November 18: Critical Perspectives on Social and Natural Science

Forsyth, Tim

2003 Chapter 2: Environmental Science and Myths. *Critical Political Ecology: The Politics of Environmental Science*. Pp. 24-51. New York: Routledge.

November 20: Ecological Knowledge and Sustainability—Social Sciences

Alcorn, Janis B.

1981 Huastec Noncrop Resource Management: Implications for Prehistoric Rain Forest Management. *Human Ecology* 9(4):395-417.

Posey, Darrell Addison

1985 Indigenous management of tropical forest ecosystems: the case of the Kayapo Indians of the Brazilian Amazon. *Agroforestry Systems* 3:139-158.

November 23: Ecological Knowledge and Sustainability—Natural Sciences

Ticktin, Tamara, and Timothy Johns

2002 Chinanteco Management of *Aechmea Magdalenae*: Implications for the Use of TEK and TRM in Management Plans. *Economic Botany* 56(2):177-191.

Yibarbuk, D., P.J. Whitehead, J. Russell-Smith, D. Jackson, C., Godjuwa, A. Fisher, P. Cooke, D. Choquenot, and D.M.J.S. Bowman

2001 Fire ecology and aboriginal land management in central Arnhem Land, northern Australia: a tradition in ecosystem management. *Journal of Biogeography* 28:325-343.

November 25: No Lecture—Work on Reading Journal

November 27: Thanksgiving Break

9. Policy and Practice

November 30: No Lecture

- Chatty, Dawn, and Marcus Colchester
 2002 Introduction: Conservation and Mobile Indigenous Peoples. Conservation and Mobile Indigenous Peoples: Displacement, Forced Settlement, and Sustainable Development. D. Chatty, Marcus Colchester, ed. Pp. 1-20. New York: Berghahn Books.
- Ticktin, Tamara, and Jeremy Spoon
 2009 Chapter 15: Ethnobiology and Conservation. In Encyclopedia of Life Support Systems (EOLSS). J.R. Stepp, ed: UNESCO.
- December 2: Indigenous Peoples and Protected Areas
- Debate from *Conservation Biology* 2000 14(5):
- Schwartzman, S., D. Nepstad, and A. Moreira
 2000a Rethinking Tropical Forest Conservation: Perils in Parks. Conservation Biology 14(5):1351-1357.
- Terborgh, John
 2000 The Fate of Tropical Forests: A Matter of Stewardship. Conservation Biology 14(5):1358-1361.
- Redford, Kent, and Steve Sanderson
 2000 Extracting Humans from Nature. Conservation Biology 14(5):1362-1364.
- Colchester, Marcus
 2000 Self Determination or Environmental Determinism for Indigenous Peoples in Tropical Forest Conservation. Conservation Biology 14(5):1365-1367.
- Chicchon, Avecita
 2000 Conservation Theory Meets Practice. Conservation Biology 14(5):1368-1369.
- Schwartzman, S., D. Nepstad, and A. Moreira
 2000b Arguing Tropical Forest Conservation: People versus Parks. Conservation Biology 14(5):1370-1374.

December 4: Exam 2 Review

December 6: No Class (Instructor Available)

December 10: Exam 2 Due (12:00 pm Anthropology Department Baskets)

COURSE SCHEDULE

| Week | Day | Date | Month | Readings to be discussed, assignments due, etc. |
|------|-----|------|-----------|--|
| 1 | M | 28 | September | Handout: Syllabus |
| | W | 30 | | Read: Robbins |
| | F | 2 | October | Read: Townsend |
| 2 | M | 5 | | Read: Smith |
| | W | 7 | | Read: AAA Code of Ethics; Ethnobiology Society Code of Ethics; Declaration on the Rights of Indigenous Peoples |
| | F | 9 | | Due: Reading Journal 1 Read: Beteille; Childs and Delgado; Kuper; Asch et al |
| 3 | M | 12 | | Read: Jelinski; Marten |
| | W | 14 | | Read: Berkes; Turner et al |
| | F | 16 | | Read: Kalland; Maffi |
| 4 | M | 19 | | Read: Ellen |
| | W | 21 | | Film: Gathering Devah Read: Klindienst |
| | F | 23 | | Due: Reading Journal 2 Read: Etkin |
| 5 | M | 26 | | Read: Zent |
| | W | 28 | | Read: Bates; Wongbusarakum |
| | F | 30 | | Read: Ross; Zarger and Stepp |
| 6 | M | 2 | November | Read: Florey; Sillitoe |
| | W | 4 | | Film: Beyul—Sacred Hidden Valleys of the Himalaya Read: Grim |

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| | F | 6 | | Due: Reading Journal 3 Review for Exam I |
| 7 | M | 9 | | Due: Exam I Film: In The Light of Reverence |
| | W | 11 | | No Class (Veterans Day) |
| | F | 13 | | Read: Catanoiu and Saucius; Sarmiento et al; Villfane |
| 8 | M | 16 | | Read: Godoy; Rigg; Reyes-Garcia et al (optional) |
| | W | 18 | | Read: Forsyth |
| | F | 20 | | Due: Reading Journal 4 Read: Alcorn; Posey |
| 9 | M | 23 | | Read: Ticktin and Johns; Yirabuk et al |
| | W | 25 | | Read: No Lecture (Work on Reading Journals) |
| | F | 27 | | Read: Thanksgiving Break |
| 10 | M | 30 | | No Lecture Read: Chatty and Colchester; Ticktin and Spoon |
| | W | 2 | December | Read: Conservation Biology 2000 14(5)—5 readings |
| | F | 4 | | Due: Reading Journal 5 Review for Exam II |
| 11 | M | 6 | | No Class: Instructor Available |
| | R | 10 | | Due: Exam II (12:00 pm in Anthropology Department Baskets) |