

ANTHROPOLOGY 213
ETHNOBOTANY: PLANTS & PEOPLES

BULLETIN INFORMATION

ANTH 213 – Ethnobotany: Plants and Peoples (3 credit hours)

Course Description:

Anthropological overview of the interactions between cultures around the world and the plants that affect them, from cultural, biological, archaeological, and linguistic points of view.

SAMPLE COURSE OVERVIEW

Every culture depends on plants for needs as diverse as food, shelter, clothing, and medicines. Certain plants hold symbolic meanings for people. Plants affect people in many ways. Ethnobotany—the interrelationships between cultures and plants—is a field of study by disciplines as diverse as anthropology, botany, chemistry, pharmacognosy, and engineering. This course provides students with a multi-cultural overview of human-plant interactions through the lenses of the four anthropological subfields of cultural anthropology, biological anthropology, linguistics, and archaeology. No background in either anthropology or botany is needed, just a curiosity to learn more about human-plant relationships. The emphasis is on cultural anthropology: students participate in a class research project on an ethnobotanical subject.

ITEMIZED LEARNING OUTCOMES

Upon successful completion of ANTH 213, students will be able to:

1. Define ethnobotany;
2. List the subfields of anthropology and summarize how each intersects with ethnobotany;
3. Outline differences in worldviews and how those affect human-nature relationships;
4. Summarize important ethnobotanical issues;
5. Give examples of ethical responsibilities in human subject research;
6. Be professionally and nationally CITI certified for human subject research;
7. Conduct an oral interview;
8. Apply the scientific method by stating a testable hypothesis, researching the topic, compiling data, and evaluating the findings.

SAMPLE REQUIRED TEXTS/SUGGESTED READINGS/MATERIALS

No textbook. Example readings, shown by Class number:

Class 2 Dreifus 1999. A Conversation with Dr. Michael J. Balick: New York's a Jungle, and One Scientist Doesn't Mind. *New York Times*.

Milius 2004. Travels with the War Goddess: Embedded Journalism in a Samoan Drug-

Discovery Expedition. *Science News* 165(22):344-346.
Nabhan 1997. excerpts from *Cultures of Habitat: On Nature, Culture, and Story*.
Counterpoint, Washington, D.C.
Robin 2001. In Memoriam: Richard Evans Schultes, 1915-2001. *HerbalGram* 52:61-64.

Class 3 Salmon 2000. Kincentric Ecology: Indigenous Perceptions of the Human-Nature Relationship. *Ecological Applications* 10(5):1327-1332.
Pouteau 2014. Beyond "Second Animals": Making Sense of Plant Ethics. *Journal of Agricultural and Environmental Ethics* 27:1-25.

Class 5 Balmford et al. 2002. Why Conservationists Should Heed Pokemon. *Science* 295(5564):2367.
Kareiva 2008. Ominous Trends in Nature Recreation. *Proceedings of the National Academy of Sciences* 105(8):2757-2758.

Class 8 Boster 1986. Exchange of Varieties and Information Between Aguaruna Manioc Cultivators. *American Anthropologist* 88(2):428-436.
Turner, Nancy J. 1988. "The Importance of a Rose": Evaluating the Cultural Significance of Plants in Thompson and Lillooet Interior Salish. *American Anthropologist* 90(2):272-290.

Class 12 Maffi 2002. Endangered Languages, Endangered Knowledge. *International Social Science Journal* 173:385-393.
van Andel 2015. African Names for American Plants. *American Scientist* 103(July-August): 268-275.

Class 14 VanDerwarker et al. 2016. New World Paleoethnobotany in the New Millennium (2000-2013). *Journal of Archaeological Research* [online only at present].

Class 19 Miller 2011. The Discovery of Medicines from Plants: A Current Biological Perspective.
Economic Botany 65(4):396-407.

Class 20 Torres-Avilez et al. 2015. Medicinal Plant Knowledge in Caribbean Basin: A Comparative Study of Afrocaribbean, Amerindian and Mestizo Communities. *Journal of Ethnobiology and Ethnomedicine* 2015:11-18.

Class 26 Nabhan et al. 2002. Safeguarding Species, Languages, and Cultures in the Time of Diversity Loss: From the Colorado Plateau to Global Hotspots. *Annals of the Missouri Botanical Garden* 89(2):164-175.

Class 27 Tarter 2015. Trees in Vodou: An Arbori-Cultural Exploration. *Journal for the Study of Religion, Nature and Culture* 9(1):87-112.
Mandondo 1997. Trees and Spaces as Emotion and Norm Laden Components of Local Ecosystems in Nyamoropa Communal Land, Nyanga District, Zimbabwe. *Agriculture and Human Values* 14:353-372.

SAMPLE ASSIGNMENTS AND/OR EXAMS

1. Six online 20-question Worksheets:

- a. Ethnobotany
- b. Ethics and Ethnography
- c. Botany
- d. Linguistics
- e. Paleoethnobotany
- f. Biological Anthropology

2. Online 4-question quizzes on assigned readings: Due by class time of the day the reading is discussed. Readings should be read (and for those numbered, questions answered online on Blackboard) BEFORE class begins on the date the readings are listed in the syllabus. Reading questions go offline at class start time on the day a reading is listed in the syllabus. Your top 20 online reading scores will be counted out of the total online reading quizzes. Additional extra reading quizzes may be posted for extra credit.

3. 4 Assignments:

- a. **CITI human subject research, professional certification** (must pass 5-hour online course);
- b. **Reflexive 3-4-page essay on personal worldview:** Your personal worldview informs your actions and interactions. In class we learn about a generalized Western worldview, and a generalized indigenous worldview, each of which has a very different view of nature and human's place or role in nature. In this essay, reflect on your worldview – especially as it applies to human/nature interactions – and what aspects of your past life experiences influenced the worldview you hold. An example essay from a student at the University of Kansas has been posted under Assignments in Blackboard. This essay is presented with the permission of the student, and his instructor (Ray Pierotti). Obviously, this student put a lot of thought and self-reflection into writing this essay. Your essay does not need to be so long, but certainly attempt to reach this level of self-reflection.
- c. **Pre-project questions to answer.**
- d. **Briefing Paper on Whether Genetically Modified Food Should be Labeled:**
You are an intern in the office of a state senator. She has asked you to write her a short 3-4 page Briefing Paper on whether or not genetically engineered food should be specially labeled. The paper has the following sections: (1) Short introductory paragraph briefly explaining what is meant by genetic engineering (so a state senator could understand). (2) A second introductory paragraph setting out the basic issues connected with labeling of genetically engineered foods and the players involved (the stakeholders who are for or against such labeling or who would be involved in implementation of labeling). You will be graded on how many of the different stakeholders you identify. This is the section that is often inadequate, so do your research thoroughly before writing this. This may become two paragraphs: one on the stakeholders who will tend to be against labeling, and one on the stakeholders who will tend to be for labeling.

(3) Pros or arguments FOR labeling GE foods. Include at least 5 substantiated facts for which you demonstrate good understanding. (4) Cons or arguments AGAINST labeling GE foods. Include at least 5 substantiated facts for which you demonstrate good understanding. (5) A short summary statement that draws together the basic issues, the players, and the positions they are likely to take so that the senator will be prepared for the upcoming debate. (6) Extra to the 3-4 pages of writing, include a References Cited section.

- 4. Class Research Project:** Help write or revise standardized interview; collect verbal interviews and enter data; hypothesis approval; tables approval; analysis completion; short (4-page) written paper or short movie; presentation. Topic example: Botanical Knowledge.

SAMPLE COURSE OUTLINE WITH TIMELINE OF TOPICS, READINGS/ ASSIGNMENTS, EXAMS/PROJECTS

Class 1: Introduction and Course Overview
Video: Hedges.

Class 2: Overview of Ethnobotany and Valuing Cultural Diversity
Read: selected biographies/autobiographies of ethnobotanists
Video: Dreams from Endangered Cultures [Wade Davis] (22:01)
Assigned: Assignment A, Worksheet 1.

Class 3: Differing Worldviews
Read: Salmon 2000; Pouteau 2014.
Assigned: Assignment B.

Class 4: Indigenous Worldview
Read: Basso 1996.
Video: Teachings of the Tree People
DUE: Worksheet 1.

Class 5: Ecoliteracy
Read: Balmford et al. 2002; Kareiva 2008

Class 6: Botanical Knowledge of South Carolinians
Read: Hunn 2000; Wagner 2008a.
DUE: Assignment B.

Class 7: Ethics and Human Subject Research
DUE: Assignment A.
Assigned: Assignment C.

Class 8: Ethnographic Research Methods
Read: Boster 1986; Turner 1988.

Class 9: CLASS PROJECT WORKSHOP
Read: Puri and Vogl 2005: Sections 6.3-7.2.3 and Section 7.7
DUE: Worksheet 2.
DUE: Assignment C

Class 10: CLASS PROJECT WORKSHOP: The Interview Process

Class 11: Botanical Background
Read: Royal Botanic Gardens, Kew 2000

Class 12: What's in a Name? Folk Taxonomy and Linguistics
Read: Maffi 2002; van Andel 2015.
DUE: Hypothesis.

Class 13: Folk Taxonomy and Linguistics
Read: Brown 2000; Nabhan 1987.
Video: Plants and the Cherokee (26 min)
DUE: Worksheet 3.

Class 14: Paleoethnobotany
Read: excerpts from VanDerwarker et al. 2016.

Class 15: Paleoethnobotany
Read: Wagner 2008b.
DUE: Worksheet 4

Class 16: WORKSHOP: Fibers
DUE: approved hypothesis.

Class 17: PROJECT WORKSHOP: How to Write a Research Paper
DUE: Typed interviews.
DUE: Worksheet 5.

Class 18: Biological Anthropology: Nutrition

Class 19: Biological Anthropology: Medicine
Read: Miller 2011.

Class 20: Medicinal Plant Knowledge
Read: Torres-Avilez et al. 2015.
Video: Secrets of the Rainforest.
Assigned: Assignment D.
DUE: Worksheet 6.

Class 21: WORKSHOP: Medicinal Plants

Class 22: Politics and Genetic Diversity
DUE: Project paper.

Class 23: FrankenGenes? Biotechnology versus Plant Breeding

Class 24: Should Genetically Modified Food be Labeled? Class Discussion
DUE: Assignment D.

Class 25: Gardening
Video: City Farmer (31 min).

Class 26: Biocultural Diversity
Read: Nabhan et al. 2002
DUE: Revised Project paper.

Class 27: In Celebration of Trees
Read: Tarter 2015; Mandondo 1997.
Video: Between Earth & Sky: Trees as Silent Teachers [Nalini Nadkarni] (23:12)

Class 28: Ethnobotany Course Wrap-Up

FINAL EXAMINATION WEEK: Individual student presentations