

# **ANTH 213: Ethnobotany: Plants & Peoples (Section 001)**

Spring 2018

TR 1:15-2:30 pm

Hamilton 140

Core GSS course; For ANTH majors, counts as a Cultural course

**Instructor:** Dr. Gail E. Wagner

432 Gambrell; 777-6548; best way to contact me is [gail.wagner@sc.edu](mailto:gail.wagner@sc.edu)

**OFFICE HOURS:** Tuesday and Thursday 10:30-11:30 am, or easily by email appointment.

## **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.

## **LEARNING OUTCOMES**

Upon successful completion of Anthropology 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.

**NO TEXTBOOK. Readings posted on Blackboard.**

## **CLASS ATTENDANCE IS REQUIRED**

Missing more than 3 classes results in grade reduction: ALL material is given in class:  
IF YOU CANNOT ATTEND CLASS REGULARLY, DO NOT SIGN UP!!!

## **GRADING**

Class attendance is REQUIRED. More than 3 unexcused absences (=1.5 weeks) results in subtraction of 2 points (1%) from your final grade for each additional day missed. NO make-up work is allowed, so work instead at getting the assignments and readings completed on time. Two points (1%) will be subtracted for each day an assignment is overdue – missing class is no excuse. Extra credit will be offered if you score 1 or higher on EVERY assigned reading, and for timely completion of the end-of-semester course review.

Grading will be determined as follows out of **200 possible points**:

- Class Project [includes fieldwork, hypothesis/tables/analysis, paper, and presentation] (70 points or 35%)
- Online Reading Quizzes (30 points or 15%) [Top 15 scores from these and any movie quizzes]
- Assignments (40 points or 20%)
- Worksheets (60 points or 30%) [six worksheets, each worth 10 points]

A	182-200 points	91-100%
B+	174-181 points	87-90.5%
B	160-173 points	80-86.5%
C+	152-159 points	76-79.5%
C	130-151 points	65-75.5%
D+	122-129 points	61-64.5%
D	100-121 points	50-60.5%
F	0-99 points	<50%

If Pass/Fail grading is elected, at least 100 points must be earned for the grade of Pass. The grade of Fail is assigned when the student earns 99 points or less. To apply to Carolina Core requirements, courses must be taken for regular letter grades. Students should consult their academic deans before electing Pass/Fail grading.

**Six online Worksheets worth 10 points each:** (60 points = 30%)

- |                            |             |
|----------------------------|-------------|
| 1) Ethnobotany             | Due Jan. 30 |
| 2) Botany                  | Due Feb. 8  |
| 3) Linguistics             | Due Feb. 13 |
| 4) Ethics and Ethnography  | Due Mar. 1  |
| 5) Biological Anthropology | Due Mar. 22 |
| 6) Paleoethnobotany        | Due Mar. 29 |

**Online 4-question quizzes worth 2 points each on assigned readings:** (total of 30 points or 15%)

Due by class time of the day the reading is discussed. Readings should be read and questions answered online on Blackboard BEFORE class begins on the date the readings are listed in the syllabus. Reading questions go offline permanently at class start time on the day a reading is listed in the syllabus. Your top 15 online reading scores and in-class video questions will be counted out of the total offered.

**Assignments:** (total of 40 points or 20%)

- A. **Reflexive 2.5-3-page essay on personal worldview** (10 pts)

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.

- B. **CITI human subject research, professional certification** (must pass 5-hour online course)(15 pts);
- C. **Pre-project questions to answer** (5 pts)
- D. **Case Study: Temples, Terraces, and Rice Farmers of Bali** (10 pts)

In this socio-environmental case study, spread over several days of class, you will work individually and in small groups to compare traditional methods of agriculture to the aftermath of the Green Revolution in Bali, Indonesia. This case study illustrates some of the complexities involved in a real-life situation and how worldview and cultural custom affect one culture's ability to grow rice.

**Class Research Project:** (70 points or 35%) 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.

**ACADEMIC INTEGRITY:** You are expected to practice the highest possible standards of academic integrity. Any deviation from this expectation will result in a minimum of your failing the assignment, and may result in additional, more severe disciplinary measures up to and including referring you to the Office of Academic Integrity. For more information, see the Carolina Community Student Handbook. Remember that the first tenet of the Carolinian Creed is, "I will practice personal and academic integrity."

**RESPECT:** All participants in the class are expected to display respect to each other, to the instructor, and to the places where the course meets. Personal use of the internet, phones, or other electronic devices during class time is rude AND forbidden.

**ACCOMMODATIONS:** Any student with a documented disability should contact the Office of Student Disability Services at 803-777-6142 to make arrangements for appropriate accommodations.

## PROJECTED SYLLABUS

- JAN**    16    Introduction and Course Overview
- 18    Overview of Ethnobotany and Valuing Cultural Diversity  
              **Read:** selected biographies/autobiographies of ethnobotanists  
              **Video:** *Dreams from Endangered Cultures* [Wade Davis] (22:01)  
              **Assigned:** Worksheet 1: Ethnobotany.
- 23    Differing Worldviews  
              **Read 1:** Salmon 2000, Kincentric Ecology;  
              **Read 2:** Pouteau 2014, Plant Ethics.  
              **Video:** Do Plants Have Dignity? (14:36)  
              **Assigned:** Assignment A: Worldview Essay.
- 25    Indigenous Worldview  
              **Read 3:** Basso 1996, Wisdom Sits in Places.  
              **Read 4:** Margolin 2005, Indian Pedagogy.  
              **Video:** *Teachings of the Tree People* (23 min)  
              **Assigned:** Assignment B: CITI Certification
- 30    Ecoliteracy  
              **Read 5a:** Balmford et al. 2002, Conservationists Should Heed Pokemon;  
              **Read 5b:** Kareiva 2008, Ominous Trends in Nature Recreation.  
              **DUE:** Worksheet 1: Ethnobotany.
- FEB**    1    Botanical Background  
              **Read 6:** Royal Botanic Gardens, Kew 2000, Plant Names.  
              **DUE:** Assignment A: Worldview Essay.

- FEB**
- 6 Folk Taxonomy and Linguistics  
**Read 7:** Brown 2000, Folk Classification;  
**Video:** *Plants and the Cherokee* (26 min)
  - 8 What's in a Name? Folk Taxonomy and Linguistics  
**Read 8:** Maffi 2002, Endangered Languages, Endangered Knowledge;  
**Read 9:** van Andel 2015, African Names for American Plants.  
**DUE:** Worksheet 2: Botany
  - 13 Seeds of Memory: Botanical Legacies of the African Diaspora  
**Guest Speaker:** Judith Carney  
**Read 10:** Carney 2013, Seeds of Memory.  
**DUE:** Worksheet 3: Linguistics
  - 15 Botanical Knowledge of South Carolinians  
**Read 11:** Hunn 2002, Precocious Acquisition of Plant Knowledge by Zapotec Children;  
**Read 12:** Wagner 2008a, Botanical Knowledge of College Students.
  - 20 Ethnographic Research Methods  
**Read 13:** Boster 1986, Exchange of Varieties and Information;  
**Read 14:** Turner 1988, Evaluating Cultural Significance of Plants.  
**Assigned:** Assignment C, Pre-Project Questions.
  - 22 **PROJECT WORKSHOP:** Imagining the Project  
**DUE:** Assignment C: Pre-Project Questions
  - 27 **PROJECT WORKSHOP:** The Interview Process  
**Assigned:** Collection of interviews; Writing hypothesis and table headings.  
**DUE:** Assignment B: CITI Certification.
- MAR**
- 1 The Concept of Trees  
**Read 15:** Wohlleben 2015a, The Hidden Life of Trees.  
**Video:** *Nature's Internet: How Trees Talk to Each Other in a Healthy Forest* (19:32)  
**DUE:** Worksheet 4: Ethics and Ethnography
  - 6 Biological Anthropology: Nutrition  
**DUE:** First interview entered into Excel and submitted;  
**DUE:** Hypothesis and table headings.
  - 8 Biological Anthropology: Medicinal Plant Knowledge  
**Read 16:** Vandebroek and Moerman 2015, The Anthropology of Ethnopharmacology.
  - 13-15 **NO CLASS – SPRING BREAK**
  - 20 **PROJECT WORKSHOP:** How to Write a Research Paper  
**DUE:** Typed interviews.  
**DUE:** Approved hypothesis, table headings.  
**Assigned:** Project Paper.

- MAR 22** Paleoethnobotany: Domestication  
**DUE:** Worksheet 5: Biological Anthropology.
- 27 Paleoethnobotany: Diet  
**Read 17:** Wagner 2008b, Seasonal Diet at a Fort Ancient Community.
- 29 Corn is Life  
**Video:** *Hopi: Corn is Life* (18 min)  
**Read:** Bruchac 1995, The People of Maize  
**DUE:** Worksheet 6: Paleoethnobotany
- APR 3** Introduction to **Case Study: Temples, Terraces, and Rice Farmers of Bali – 1**  
**DUE:** Paper Introduction/hypothesis and filled-in table(s).
- 5 **Case Study: Temples, Terraces, and Rice Farmers of Bali - 2**
- 10 **Case Study: Temples, Terraces, and Rice Farmers of Bali - 3**
- 12 **Case Study: Temples, Terraces, and Rice Farmers of Bali - 4**  
**DUE:** Project paper.
- 17 Politics and Genetic Diversity
- 19 Cycling Back to Trees and Worldviews  
**Read 18:** Wohlleben 2015b, The Hidden Life of Trees  
**Video:** *Between Earth & Sky: Trees as Silent Teachers* [Nalini Nadkarni] (23:13)
- 24 **WORKSHOP:** Making Paper and other hands-on activities  
**DUE:** Revised Project paper.
- 26 Ethnobotany Course Wrap-Up

<p align="center"><b>PROJECT PRESENTATIONS (REQUIRED)</b>  <b>Thursday, May 3, 4:00-6:30 pm in Hamilton 140</b></p>
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**Films shown in class:**

- Coughlan, Donald. 1997 (18 min). *Hopi: Corn is Life*. American Indian Video Series.
- David, Wade. 2003 (21:51). Dreams from Endangered Cultures. TED talks.  
[http://www.ted.com/talks/wade\\_davis\\_on\\_endangered\\_cultures/](http://www.ted.com/talks/wade_davis_on_endangered_cultures/)
- Easterling, Nancy. 2001 (26 min). *Take a Closer Look: Plants and the Cherokee*.  
 Cooperative effort by the North Carolina Botanical Garden, The Museum of the Cherokee Indian, and Laurel Hill Press.
- Jennings, Katie. 2006 (58 min). *Teachings of the Tree People: The Work of Bruce Miller*.  
 An Islandwood Production, Washington.
- Koechlin, Florianne. 2015 (14:36). Tomatoes Talk, Birch Trees Learn – Do Plants Have Dignity?  
 TEDxZurich. <https://www.youtube.com/watch?v=i8YnvMpcrVI>

- Lansing, J. S. and A. Singer. 1988 (52 min). *The Goddess and the Computer*.  
Documentary Educational Resources, Watertown, MA.
- Nadkarni, Nalini. 2014 (23:13). Between Earth and Sky: Trees as Silent Teachers. Bioneers Conference.  
<https://www.youtube.com/watch?v=ZRFs6SblhBY>
- Simard, Suzanne. 2017 (19:32). Nature's Internet: How Trees Talk to Each Other in a Healthy Forest.  
TEDxSeattle. <https://www.youtube.com/watch?v=breDQqrkikM>

### **ANTH 213 Spring 2018 Required Reading List**

Read **before** class on the date marked

- JAN** 18 Dreifus 1999. A Conversation with Dr. Michael J. Balick: New York's a Jungle, and One Scientist Doesn't Mind. *New York Times*.
- Milius, Susan. 2004. Travels with the War Goddess: Embedded Journalism in a Samoan Drug-Discovery Expedition. *Science News* 165(22):344-346.
- Nabhan, Gary Paul. 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.
- 23 Rd1. Salmon, Enrique. 2000. Kincentric Ecology: Indigenous Perceptions of the Human-Nature Relationship. *Ecological Applications* 10(5):1327-1332.
- Rd2. Pouteau, Sylvie. 2014. Beyond "Second Animals": Making Sense of Plant Ethics. *Journal of Agricultural and Environmental Ethics* 27:1-25.
- 25 Rd3. Basso, Keith H. 1996. Quoting the Ancestors. In *Wisdom Sits in Places: Landscape and Language among the Western Apache*, by Keith H. Basso, pp. 3-35. University of New Mexico Press, Albuquerque.
- Rd4. Margolin, Malcolm. 2005. Indian Pedagogy: A Look at Traditional California Indian Teaching Techniques. In *Ecological Literacy: Educating Our Children for a Sustainable World*, edited by Michael K. Stone and Zenobia Barlow, pp. 67-79. Sierra Club Books, San Francisco.
- 30 Rd5a. Balmford, Andrew, Lizzie Clegg, Tim Coulson, and Jennie Taylor. 2002. Why Conservationists Should Heed Pokemon. *Science* 295(5564):2367.
- Rd5b. Kareiva, Peter 2008. Ominous Trends in Nature Recreation. *Proceedings of the National Academy of Sciences* 105(8):2757-2758.
- FEB** 1 Rd6. Royal Botanic Gardens, Kew. 2000. Kew Information Sheet B2: *Plant Names*.
- 6 Rd7. Brown, Cecil H. 2000. Folk Classification: An Introduction. In *Ethnobotany: A Reader*, edited by Paul E. Minnis, pp. 65-68. University of Oklahoma Press, Norman.
- 8 Rd8. Maffi, Luisa. 2002. Endangered Languages, Endangered Knowledge. *International Social Science Journal* 173:385-393.
- Rd9. van Andel, Tinde R. 2015. African Names for American Plants. *American Scientist* 103(July-August):268-275.

- FEB** 13 Rd10. Carney, Judith. 2013. Seeds of Memory: Botanical Legacies of the African Diaspora. In *African Ethnobotany in the Americas*, edited by Robert Voeks and John Rashford, pp. 13-33. Springer, NY.
- 15 Rd11. Hunn, E. S. 2002. Evidence for the Precocious Acquisition of Plant Knowledge by Zapotec Children. In *Ethnobiology and Biocultural Diversity*, edited by J.R. Stepp, F.S. Wyndham, & R.K. Zarger, pp. 604-613. International Society of Ethnobiology, Athens, Georgia.
- Rd12. Wagner, Gail E. 2008a. Botanical Knowledge of a Group of College Students in South Carolina, U.S.A. *Ethnobotany Research & Applications* 6:443-458.
- 20 Rd13. Boster, James S. 1986. Exchange of Varieties and Information between Aguaruna Manioc Cultivators. *American Anthropologist* 88(2):428-436.
- Rd14. 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.
- MAR** 1 Rd15. Wohlleben, Peter. 2015a. The Hidden Life of Trees. (30 pages of excerpts) Greystone Books, Vancouver.
- 8 Rd16. Vandebroek, Ina and Daniel E. Moerman. 2015. The Anthropology of Ethnopharmacology. In *Ethnopharmacology*, edited by Michael Heinrich and Anna K. Jäger, pp. 17-28. John Wiley & Sons, Chichester, UK.
- 27 Rd17. Wagner, Gail E. 2008b. What Seasonal Diet at a Fort Ancient Community Reveals about Coping Mechanisms. In *Case Studies in Environmental Archaeology, 2nd Ed.* Edited by Elizabeth J. Reitz, C. Margaret Scarry, and Sylvia J. Scudder, pp. 277-296. Springer, NY.
- 29 Bruchac, Joseph. 1995. The People of Maize. In *Native Plant Stories*, as told by Joseph Bruchac, pp. 71-75. Fulcrum Publishing, Golden, CO. [no reading quiz]
- APR** 19 Rd18. Wohlleben, Peter. 2015b. *The Hidden Life of Trees. What They Feel, How They Communicate: Discoveries from a Secret World.* (31 pages of excerpts) Greystone Books, Vancouver.