Instructor: Michelle Roberts Ph.D.
Office Hours: By Appointment only
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Course Description

This course looks at ethnobiology, or the study of ethnic groups and their relationships with plants (ethnobotany), animals (ethnozoology) and their overall environment (ethnoecology). In particular, we will focus on the field of ethnobotany or the interdisciplinary study of past, present and potential future uses of plants, the products that are made from them (such as paper and medicines), their impact on the development of human societies (such as the origins of agriculture), the cultural contexts in which plants are used, and the impact of humans on plant populations. We will discuss ethical issues related to ethnobiological study, such as intellectual property rights and compensation, as well as issues of sustainability, conservation, and environmental management. Although our core approach to these topics is through anthropology we may also discuss linguistics, human cognition, biology, botany, genetics and chemistry.

Core Objectives

CO 9 - Students will be able to connect science and technology to real-world problems by explaining how science relates to problems of societal concern; be able to distinguish between sound and unsound interpretations of scientific information; employ cogent reasoning methods in their own examinations of problems and issues; and understand the applications of science and technology in societal context.

This course engages students with natural environment both locally and globally as it pertains to both woody and herbaceous plants. The plant world continues to be a primary focus of study among anthropologists and this course exposes students to folk and indigenous knowledge of plants and the role of plants play in our contemporary world. Thus, students will learn the principles of ethnobotany and how plants are perceived and impacted in the day and age of globalization, embracing topics such as traditional resources and implications of genetically modified organisms and climate change.
**Student Learning Outcomes:**

Upon completion of this course, students will be able to:

1) Articulate the role that plants play in the lives of humans, past and present
2) Demonstrate the implications of climate change and globalization on plants in contemporary human societies
3) Comprehend the value that traditional resource management has in creating alternative resource management regimes
4) Understand the process through which plants are harnessed among traditional and complex societies
5) Examine the similarities and differences between Western and traditional science in the utilization and management of plants and plant material
6) Assess the issues involved in the appropriation of traditional plant use by Big Pharma

**Required Textbooks:**


There will be required articles and other book chapters as listed in the course outline. These additional readings can be found on Webcampus.

**Office Hours, Phone Calls and Email:** The best way to get in touch with me is via e-mail. I will try to respond to your e-mails within a 24 hour time period unless it’s during a weekend or holiday period. I DO NOT have a campus phone. If it is an urgent situation please call the Anthropology department at 784-6704 and leave a message with a person. I am available before and after class; please talk to me at this time.

**Requirements and Grading:**

**Cell phones** must be turned OFF during class time. Due to the space in our classroom it is easiest if you take notes in a notebook rather than a computer.

**Attendance and Participation:** You are expected to come to class every class period. Attendance will be taken when we meet and participation in discussions based on knowledge of the assigned reading is strongly encouraged. Attendance will be considered when tallying up final grades.

I do **NOT** accept late work; everything must be turned in on time.
**Reaction Paper and Class Discussions:** Every Student will write **TWO reaction papers** (minimum 2 pages, maximum 4 pages; use 1.5 spacing so I can write comments/edits as needed) based on one class reading that you will sign up for. The write up should include three parts: 1) **Summarize the reading in your own words** (this should be brief and only make-up about 1/3 of your total write-up) 2) **This part should be more creative, and comprise the bulk of your write-up.** You can give a general reaction to the reading, relate it to something else you’ve read for this class, from other anthropology classes, from the news or elsewhere, or you can relate it to a personal observation, or a combination of these suggestions 3) **Include three or four questions to ask your classmates in order to get the discussion flowing.** The papers will be graded for content, but poor grammar will result in the loss of points. Always proof read your work! Each paper/discussion lead is **worth 41 points.** No late assignments will be accepted!

Every student is expected to have done the readings and knowledgeably discuss them on the assigned days. Everyone must turn in **a brief summary of each reading** on the day it will be discussed. The summaries **do not need to be long** (a half page single spaced or a full page of a bulleted list should suffice for undergraduates; for graduate students the summaries should be a minimum of a full page, single spaced) but they should reflect that you have done the reading and include key points that may be important for the discussion. In addition to the brief summary you must include **ONE question about the reading.** Everyone is expected to contribute to the class discussions, if you do not contribute to each discussion you will be docked points (in other words if you are physically present but not mentally present you will not get full points. If you are habitually tardy and miss parts of discussions you will also be docked points). Each Summary/discussion participation is worth **6 points. These must be typed and turned in on the assigned dates; NO exceptions! You must be in class to earn your discussion/summary points!**

**Research Papers 100 points and Presentations 50 points:**

**Undergraduates** will focus their papers (10 pages double spaced) on the contributions that a single plant species (or genus) has made to the world. You may consider major crop plants; some medicines; some psychoactive; some utilitarian. For example, Belladonna *Atropa belladonna* or Cotton *Gossypium spp.* may be chosen. Paper guidelines and a list of potential selections will be posted on webcampus. Basically, you will become an expert on the plant you chose and you will share your knowledge with the class in the format of a presentation (worth 50 points). Presentations may be given throughout the semester as applicable to course topics and also on the day of the final. Students will grade one another’s presentations you will earn 2 points for each presentation you grade.

**Graduate students** will do a more lengthy research paper (20 pages) preferably including a field component. Suggestions will be posted on webcampus, and we can also talk about your options after class (For example, you may have a keen interest in tomatoes *Lycopersicon esculentum* and conduct research on them as described above, and then you will need to find 2 or 3 serious tomato gardeners in the region and interview them about their varietal choices to understand their traditional knowledge base about the region etc. You will also present your research to the class.

**Extra Credit is given at the sole discretion of the instructor** and would be announced in class, if offered
Point Breakdown:

Research Paper = 100 points

Presentation = 50 points

Grading of Presentations = 2 points each presentation x 17 = 34 (~ 18 students)

Discussion summaries and participation = 39 readings x 6 = 234

Reaction Paper/Lead discussion = 41 points X 2 = 82 points

Total Class Points = 500

Grading scale is as follows (based on a percent taken from 500 possible points):

94 - 100 = A  
80 - 83 = B-  
67 - 69 = D+

90 - 93 = A-  
77 - 79 = C+  
64 - 66 = D

87 - 89 = B+  
74 - 76 = C  
60 - 63 = D-

84 - 86 = B  
70 - 73 = C-

Course Outline and Reading Assignments: Readings denoted with * are required for summaries/discussions

Note: This outline may change as the semester progresses

August 28: Introduction to the Course, What are ethnobiology and all the other ethno’s?

September 4: Ethnobotany and the Nature of Plants

Mandatory Field trip to Evans Creek Hands-on experience to broaden and foster an understanding of upcoming course topics (Dress appropriately according to the weather, we will be outside for the duration of class). Meet at 2975 N. Virginia St. (Also called the Reno Sports Complex—it’s at the North end of UNR parking lots). Meet at the western end of the parking area, where the Frisbee gold begins.

Bring a Notebook, writing utensil and water

Nabhan, Gary. 1985. Amaranth Greens: The Meat of the Poor People (from Gathering the Desert).*

Cotton, C.M. 1996. Plant Structures Functions and Applications, Chapter 2 from Ethnobotany: Principles and Applications*
Print and bring the following two readings (we will read them in the field, don’t read them ahead of time):

Cattails and Mullein as expressed by Tom Brown

**September 11:** Ethnobotany, Ethics and Methods

Martin, Gary. 1995. Data Collection and Hypothesis Testing, Chapter 1 in *Ethnobotany*

*Ethnobiology* Chapter 3 “Ethics in Ethnobiology”*

**September 18:** Other Perspectives about Plants (Indigenous, Cultural, different social groups/stakeholders within a society, etc.)

*Ethnobiology* Chapter 21*

Pierotti, Raymond and Wildcat, Daniel. 1999. Traditional Values, culturally-based world-views and Western science in *Cultural and Spiritual Values of Biodiversity.*


**September 25:** Subsistence: Wild Foods

Article TBA*

*Chilies to Chocolate* chapters 1-4*

**October 2:** Subsistence: Agriculture and Reconstructing Past Life-ways with Plants

Article TBA*

*Chilies to Chocolate* chapters 5-9 and the epilogue*

**October 9:** Plants and Material Culture

Fowler, Catherine 1992. Chapters 6 Material Culture and 7 Clothing and Personal Adornment from *In the Shadow of Fox Peak*, Us. Fish and Wildlife Service Publication.** (2 summaries)

Extra Credit options: 1. Chapter 5 Houses from *In the Shadow of Fox Peak*

2. Fowler, Catherine and Don Fowler (editors). 2008. *The Great Basin: People and Place in Ancient Times.* School for Advanced Research Press, Santa Fe, New Mexico. Read pages 60-77 (Chapters 8, 9 and 10 but just write one summary, the chapters are only 4 to 6 pages each).*


**Guest Speaker**

**October 16:** Ethnozoology, Entomaphagy
Ethnobiology Chapters 6* and 13*


**October 23:** Ethnomedicine: Healing plants

Traditional Phytochemistry Chapter 8 from *Ethnobotany: Principles and Applications* by C.M. Cotton*

**Mandatory Field Tip to Truckee Meadow Herbs at 9:30 am sharp** (1170 S. Wells Ave. Reno, NV 89502)

**October 30:** Ethnomedicine: Healing Plants and Psychoactive plants


*The Shaman’s Apprentice* Chapters 1-5

**November 6:** Ethnomedicine Psychoactive plants Continued and Ethnomycology

*Ethnobiology* Chapter 13

*Article TBA*

*The Shaman’s Apprentice* Chapters 6-9

**November 13:** Ethnoecology and Agroecology


Article TBA* (Virginia Nazarea)

**November 20:** Traditional Resource Management


Article TBA*

**November 27:** No Class Thanksgiving Day Holiday

**December 4:** Looking towards the future
*Articles TBA (Nabhan Cultures of Habitat- Introduction and another chapter)

December 16: time allotted for our Final is 12:30 to 2:30 – Final Presentations

**Academic Success Services:** Your student fees cover usage of the Math Center (784-4433 or [www.unr.edu/mathcenter/](http://www.unr.edu/mathcenter/)), Tutoring Center (784-6801 or [www.unr.edu/tutoring/](http://www.unr.edu/tutoring/)), and University Writing Center (784-6030 or [http://www.unr.edu/writing_center/](http://www.unr.edu/writing_center/)). These centers support your classroom learning; it is your responsibility to take advantage of their services. Keep in mind that seeking help outside of class is the sign of a responsible and successful student.

**Special Needs or Disabilities or Other Problems:** The department of anthropology is committed to equal opportunities in education for all students, including those with physical or learning disabilities. Students with documented disabilities who need special help need to register with the DRC (784-6000 or [http://www.unr.edu/drc](http://www.unr.edu/drc)) and contact the instructor during the first week of class.

**Statement on Audio and Video Recording:** Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may be given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.

**Academic Dishonesty** includes cheating on exams, signing the attendance sheet for other people copying other people’s homework and plagiarism. None of these will be tolerated and can result in failure of the course and academic probation with the university registrar’s office.