## **ENVS 411**

# **Northwest Ethnobotany**

CRN: 16950

Fall 2011 – 4.0 credits Mon. & Wed. 10-11:50

11 Pacific

**Facilitators:** 

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541.346.5003 **Office Hours:** 

Monday 12:30-1:30

Tuesday 12-1

Dr. Kathryn Lynch klynch@uoregon.edu 140 Columbia 541.346.5070

by appointment



## **Course Description**

This class will examine people/plant relationships in the Pacific Northwest. We will explore how biodiversity of forest and other ecosystems is being tapped to promote both conservation and rural economic development. We will investigate the complex economics, multi-faceted politics, and diverse cultural traditions associated with nontimber forest products and other plants. We will look at the ancient gathering practices of Native Americans, the introduced plants and traditions of immigrants, and the emerging practices of people seeking to reconnect with the natural world.

## **Course Format and Philosophy:**

Active, engaged participation is central to this class. There will be very few lectures, so if you prefer passive listening, this class is not for you! Rather we will focus on critical analysis of the readings using small group discussions and participatory exercises. Emphasis will be placed on critical thinking, effective communication skills, and having fun while learning. We as a class will be responsible for the learning that occurs. That means you are responsible for doing all the reading and coming to the class prepared for critical discussion. Everyone is expected to share their opinions, perspectives and experiences. Welcome and we look forward to learning with you!

#### **Course Goals:**

- Gain an understanding of the complex relationships between people and plants
- Learn about the history and current issues of Pacific Northwest plants
- Explore ecological aspects of humans managing forests for Nontimber Forest Products (NTFPs)
- Gain experience in teamwork through a group project and presentation
- Gain critical thinking and effective communication skills through class activities and assignments
- Practice interdisciplinary thinking: bringing together social science, natural science, and the humanities through the study of economics, policy, anthropology, ecology, and history

## **Course Objectives**

By the end of this course, you will be able to:

- Discuss ways in which biodiversity is important to different cultural groups in the United States, particularly in the Pacific Northwest;
- Identify and discuss key political, economic, ecological and cultural issues related to culturally important plants
- Identify and discuss multiple uses for over fifty plants from different ecological communities in the Pacific Northwest
- Effectively present your new understandings to an audience through the written word, oral presentations and using web technology.

## **Required Texts**

- 1. Pojar, Jim and Andy MacKinnon eds. 1994. *Plants of the Pacific Northwest Coast*. Vancouver, BC: Lone Pine.
- 2. Various articles listed below, which are available on our class blackboard site.

## **Course Requirements**

## 1. Participation (10%)

You are responsible for completing all the assigned reading and coming to class prepared to discuss the materials in an analytical manner. Due to the participatory nature of this class, absences are impossible to "make-up," so attendance at all class meetings and field trips is critical.

## 2. Journal (10%)

Please see the Field Journal Assignment posted on blackboard. We recommend purchasing an unlined field notebook. Strathmore 9 x 12 inch hardbound sketchbook is a good one. They are available at the UO bookstore.

## 3. Plant Profiles

You are responsible for creating three plant profiles over the course of the term and giving a presentation to the class about each plant, so that we may learn together. On the first day of class we will break into teams based on a local ecological community and you will be given three plants from that community to profile.

## Written Profiles (15%) Three profiles

For the written portion of the profile, you will fill out a template (a separate document posted on blackboard). Using readings from class and other recommended references, you will develop a clear, concise, and informative plant profile, citing all sources appropriately. Each plant profile will be 2.5 -3 pages when completed. Email your profiles to the instructors by 10am the Monday they are due (Oct. 3, Oct. 17, Nov. 7). Please name your file "Last name. Profile # 1 (or 2, 3)."

## **Profile Presentations (15%) Three individual presentations**

One week after handing in your plant profile you will give a 2 minute presentation about your plant. Using one powerpoint slide and a professional style presentation, you will highlight the written profile to capture the audience's attention and help them to learn and

understand the plant. Your powerpoint slide is due to Devon by 5 PM the Sunday before your presentation. Please name your file "Last name. Profile # 1 (or 2, 3)." We will post all slides on the website after the presentation.

Due dates and timelines: All three profiles are due on a Monday. We will review your profile to check for inaccuracies and return comments to you by Wednesday of the same week, so that you will have five days to prepare for the presentation the following Monday.

## 4. Midterm (15%)

There will be an in-class midterm on Monday, October 31st. The midterm will cover the plants profiled up to this point as well as topics covered in class. More on this in class.

## 5. Final Project and Presentation

## The Final Project (15%)

The final project includes 3 polished one-page profiles and a two-page essay. More detailed information on this assignment will be handed out in the second half of the term. These documents will be used for teaching ethnobotany through the ELP projects spring term at Adams Elementary, Mt.Pisgah Arboretum, and HJ Andrews Experimental Forest.

## The Final Presentation (10%)

This will be a group presentation. Each plant community group will have 30 minutes to present to the class. The objective of the presentation is to teach us about the plants you profiled throughout the term. Your audience will consist of children and adults. To assist those who will be continuing with ELP, the Douglas Fir Forest group is encouraged to aim for middle-school age. The other groups can focus on elementary school age. These presentations are intended to help with your review of the plant profiles and course material as well as give you professional speaking and teaching experience.

## 6. Final Exam (10%)

The final exam is Thursday December 8th at 10:15 AM. The exam will cover all plants profiled as well as topics covered in class. More on this in class.

#### **Evaluation**

Every class is designed with explicitly defined learning objectives in mind. At the end of most classes we will evaluate where we stand in relation to these objectives. You are encouraged to actively participate in thoughtful reflection and evaluation of your educational experience, both during and at the completion of the course.

## A note on academic honesty:

All work submitted for this course must be your own and be written exclusively for this course. The use of sources (ideas, quotations, paraphrases) must be properly documented. Please consult pages 235-38 of the *Prentice Hall Reference Guide to Grammar and Usage* for a definition of plagiarism and information on documentation and refer to the summary of the Code of Student Conduct (located at http://studentlife.uoregon.edu). In cases where plagiarism has been clearly established, the award of an F for the final course grade is the standard practice. Please see Devon or Katie if you have any questions about your use of sources.

### A note on access:

If you have a disability (physical or learning) which you think may affect your performance in this class, please see us during the first week of the term so we can make arrangements, if necessary, for your full access to all classroom activities. If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with Devon or Katie soon. Please request that the Counselor for Students with Disabilities send a letter verifying your disability.

## A note about the Environmental Leadership Program:

This year, Northwest Ethnobotany is the focus of the environmental education ELP projects. ELP participants will be developing curriculum on human uses of native plants for children at Mt. Pisgah Arboretum, Adams Elementary, and HJ Andrews Experimental Forest. Applications are available on-line. This is a competitive program that gives you an opportunity to get unique hands-on experience. Students who take this class are given priority when applying.

Why apply? As you will learn, the Northwest is home to a great number of native plant species that humans have used for centuries. Unfortunately, many local children and adults are unaware of the history and culture connecting people and plants. If you are interested in environmental education, and want to transform the knowledge you learn in this class into engaging environmental education for children, please come talk to us!

Mt. Pisgah Naturalists: The mission of this team is to inspire curiosity and wonder through interpretive signs and educational lessons at Mt. Pisgah Arboretum. In winter you will develop interdisciplinary hands-on lessons and an Art in Nature workshop that will engage children and teach them about native plants and human uses at Mt. Pisgah Arboretum. In spring you will facilitate your lessons at Mt. Pisgah with fifth graders and lead your workshop at the Spring Wildflower Festival!

Adams Elementary: The mission of this team is to inspire curiosity and wonder through designing and installing a native plant garden at Adams Elementary School and developing and teaching lessons about the plants. In fall you will help install a native plants garden, winter we will develop interdisciplinary hands-on lessons and an Earth Day workshop that will engage children and teach them about native plants and how they are used by humans. In spring you will visit Adams Elementary weekly for three weeks to facilitate your lessons and lead your workshop on Earth Day.

Canopy Connections: The PNW is home to some magnificent old-growth forests. Unfortunately, many local children have never had the opportunity to explore this enchanting ecosystem first-hand. The mission of this team is to inspire curiosity and wonder while teaching children about plant/people connections. In winter you will develop interdisciplinary hands-on lessons that will engage middle-schoolers in art, creative writing, and science inquiry projects both in the canopy and on the ground at HJ Andrews. In spring you'll visit classrooms and facilitate your Canopy fieldtrip at HJA.

#### **Schedule of Topics and Reading Assignments**

#### Week One: Introductions and Overviews

## Monday September 26th

- Introductions
- Defining Ethnobotany

## Wednesday September 28th

Field Trip to Museum of Natural History
 Tour, botany activity and journal activity (please bring your journal!)

## Readings

- Elpel, T. 2008. *Botany in a day: the patterns methods of plant identification*. Pony, MT: Hops Press. Pg. 1-24.
- Pojar 21-27: Plants and People section
- Minnis, Paul E. 2000. Introduction. In Minnis, Paul E., ed. *Ethnobotany, A Reader*. Norman: University of Oklahoma Press. Pp.3-7.
- Minnis, Paul E. 2004. People and Plants in Prehistoric Western North America: An Introduction. In People and Plants in Ancient Western North America. Paul Minnis, ed. Washington, D.C.: Smithsonian Books. Pp. 1-4.

## Saturday October 1st

• Field trip to Mt. Pisgah, MycoLogical, and Mountain Rose Herbs

## Week Two: A History of Gathering

#### Monday October 3rd

#### Due: Plant Profile One (emailed, by 10am, to instructors)

- Presentation guidelines
- A Historical Look at Gathering: Focus on the Northwest: Mid-Columbia Plateau region

#### Readings

- Hunn, Eugene S. with James Selam and Family. 1990. Nchi'i-Wana "The Big River". Mid-Columbia Indians and Their Land. Seattle: University of Washington Press. Pp. 170-200. (you can skip the Raccoon story on page 186-187)
- Richards, Rebecca T. and Susan J. Alexander. 2006. Ch. 2: Early American Wild Huckleberry Gathering. A Social History of Wild Huckleberry Harvesting in the Pacific Northwest. Gen. Tech. Rep. PNW-GTR-657. Portland, OR: USDA, Forest Service, Pacific Northwest Research Station. Pp. 5-10.

#### Wednesday October 5th

- Indian Reserved Rights
- A Historical Look at Gathering: Focus on the Northwest Coast, and Western Interior.

- Goodman, E.C. 2002. Indian reserved rights. In: Jones, E. T., McLain, R. & Weigand, J. (Eds.), Nontimber Forest Products in the United States. Pp. 273-281. Lawrence, Kansas: University of Kansas Press.
- Toepel, Kathryn Anne. 2007. Excerpt from The Western Interior. In Berg, Laura, ed. The First Oregonians. Portland, OR: Oregon Council for the Humanities. Pp. 306-310.

Turner, N.J., & Peacock, S. 2005. Solving the perennial paradox. In Deur, D. & Turner, N. (Eds.), *Keeping it living: Traditions of Plant Use and Cultivation on the Northwest Coast of North America*. Seattle: University of Washington Press. Pp.101-150.

## Week Three: Edible Plants

#### Monday October 10th:

- Student profile presentations
- Alphabet soup activity

## Readings

- Thayer, S. 2006. *The forager's harvest: a guide to identifying, harvesting, and preparing edible wild plants*. Pgs. 3-12, 16-21, 23-36, 37-58.
- Kallas, J. 2010. Edible Wild Plants: wild foods from dirt to plate. Layton, Utah: Pp. 35-42.
- Kenny, M.1998. Wild Strawberry. In Niatum, D., ed. *Harpers Anthology of 20th Century Native American Poetry*. San Fransico: Harper. Pp. 37-38.

## Wednesday October 12th:

- Edible Plants continued
- Reintegration of traditional plant foods

#### Readings

- Krohn, E. & Segrest, V. 2010. Feeding the People, Feeding the Spirit. Centralia, WA: Gorham Publishing. Pp. 3, 6-9, 17-35.
- Turner, N.J. & Clifton, H.S. 2006. The forest and the seaweed. In Menzies (Ed.) *Traditional ecological knowledge and natural resource management*. Lincoln, Nebraska: University of Nebraska Press. Pp.65-86.
- Et-twaii-lish, Marjorie Waheneka. 2005. Indian perspectives on food and culture. Oregon Historical Quarterly, The Isaac I. Stevens and Joel Palmer Treaties, 1855-2005, 106(3), 468-474

#### Saturday October 15th

- Field Trip to Fern Hill Botanical Sanctuary
- Tour and hands-on activities
- Pizza party and camp out

## **Week Four: Contemporary Harvesting Cultures**

## Monday October 17<sup>th</sup> Due: Plant Profile Two (emailed, by 10am, to instructors)

- Diggers, Pickers, Foragers and More
- Analysis impacts of class, ethnicity, gender on gathering practices

- Emery, Marla. 2001. Nontimber forest Products Fact Sheet No. 6: Gatherers, Practices and Livelihood Roles of Non-timber Forest Products. Blacksburg, VA: Non-timber Forest Products Program. <a href="http://www.sfp.forprod.vt.edu/factsheets/gatherers.pdf">http://www.sfp.forprod.vt.edu/factsheets/gatherers.pdf</a> (Accessed Sept. 2011)
- Jones, Eric T. and Kathryn A. Lynch. 2002. Excerpt from The Relevance of Sociocultural Variables to Nontimber Forest Product Research, Policy, and Management. In Jones, Eric T., Rebecca J. McLain and James Weigand, eds. 2002. Nontimber Forest Products in the United States. Lawrence: University Press of Kansas. Pp. 32-38.

- Hansis, Richard. 2002. Case Study. Workers in the Woods: Confronting Rapid Change. In Jones, Eric T., Rebecca J. McLain and James Weigand, eds. 2002. Nontimber Forest Products in the United States. Lawrence: University Press of Kansas. Pp. 52-56.
- Arora, David. 1999. The Way of the Wild Mushroom. *California Wild. The Magazine of the California Academy of Sciences*. Fall. 52(4):8-19.
- Brown, Beverly A. and Agueda Marín-Hernández, eds. 2000. Selected Interviews (\*see list below) from *Voices from the Woods. Lives and Experiences of Non-Timber Forest Workers*. Wolf Creek, OR: Jefferson Center for Education and Research.
  - 1) Denise Smith, Medicinals, p. 18-19
  - 2) Oune C., Mushrooms, p. 31-32
  - 3) Arnulfo P. Brush, p. 40 or Pedro Q, Brush, p. 41
  - 4) Darci Rhodes, Brush, p. 45
  - 5) Ramon Z. Wild Huckleberries, p. 48-49

## Wednesday October 19<sup>th</sup> - db

Defining Traditional Ecological Knowledge

## Readings

- Martinez, D. 1995. American Indian cultural models for sustaining biodiversity. In: Nan Vance ed., Special Forest Products Biodiversity Meets the Marketplace. USDA Forest Service General Technical Report. GTR-Wo-63. Washington D.C.: U.S. Department of Agriculture
- Menzies, C. R., ed. 2006. Traditional ecological knowledge and natural resource management. Lincoln, Nebraska: University of Nebraska Press. Read pages 1-17.
- Turner, N. J., Ignace, M. B., & Ignace, R. 2000. Traditional ecological knowledge and wisdom of aboriginal peoples in British Columbia. *Ecological Applications* 10(5), 1275-1287.

### **Week Five: Medicinal Plants**

## Monday October 24th

- Student profile # 2 presentations
- Plants of Healing global to the local

## Readings

- Alarcon, F.X.1992. Herbs. In *Snake poems: an aztec invocation*. San Fransisco: Chronicle Books.
- Buhner, Stephen Harrod. 2002. "Chapter 9: Herbelegy" 213-234 and New York Stories Pp15-23. In The Lost Language of Plants. The Ecological Importance of Plant Medicines to Life on Earth. White River Junction, VT: Chelsea Green Publishing.
- Alexander et al. 2002. Domestic Trade -Medicinals. In: Jones, E. T., McLain, R. & Weigand, J. (Eds.), Nontimber Forest Products in the United States. Lawrence, Kansas: University of Kansas Press. Pp. 122-127.
- Gladstar, Rosemary. 1993. Introduction in Herbal healing for Women. New York: Simon & Schuster. 303 Pp.

## Wednesday October 26th

Guest Presenter on Wildcrafting Ethics

- Tremblay, G. 1998. Medicine bearer. In Niatum, D., ed. *Harper's anthology of 20th century native american poetry*. San Fransisco: Harper. p192.
- Christensen, L. 2002. The give and take of wildcrafting. Whole Terrain, 11. 4-7

#### Sunday October 30th

• Mt. Pisgah Mushroom Festival- Highly recommended but not required

#### Week Six: Traditional Ecological Knowledge

#### Monday October 31st

Midterm

#### Wednesday November 2nd

- Review of TEK
- TEK and fire use in the Pacific Northwest

#### Readings

- Kimmerer. R.W.& Lake, F.K. 2001. The Role of Indigenous Burning in Land Management. *Journal of Forestry*. 11, 36-41.
- Kimmerer, R.W. 2000. Native knowledge for native ecosystems. J. of Forestry, August, 4-9.
- Harjo, J. 1983. One cedar tree. In She Had Some Horses. NY: Thunder's Mouth Press. P.24.

#### Week Seven: The Politics of Harvesting

## Monday November 7th **Due: Plant Profile Three (emailed, by 10am, to instructors)**

- The Politics of Harvesting a timeline.
- Activity: Federal Laws and Policies Relevant to NTFPs

## Readings

• Antypas, A., McLain, R.J., Gilden, R. & Dyson, G. 2002. Federal nontimber forest products policy and management. In: Jones, E. T., McLain, R. & Weigland, J. (Eds.), Nontimber Forest Products in the United States. Lawrence, Kansas: University of Kansas Press. Pp. 347-374.

### Wednesday November 9th

- Environmental Justice
- Making Peace in the Berry Patch

- McLain, Rebecca J. 2002. "Case Study: Business As Usual: The Exclusion of Mushroom Pickers in Wild Mushroom Management in Oregon's National Forests." In Jones, Eric T., Rebecca J. McLain and James Weigand, eds. 2002. Nontimber Forest Products in the United States. Lawrence: University Press of Kansas. Pp. 375-384.
- Principles of Environmental Justice, <a href="http://www.ejrc.cau.edu/princej.html">http://www.ejrc.cau.edu/princej.html</a> (Accessed Sept. 2011)
- Fisher, A. H. 2002. Making peace in the berry patch: the 1932 handshake agreement and the promise of cultural use zones. In: Jones, E. T., McLain, R. & Weigland, J. (Eds.), *Nontimber Forest Products in the United States*. Lawrence, Kansas: University of Kansas Press. Pp. 293-299.

## Week Eight: Multi-functional Plants

#### Monday November 14th

- Student profile presentations
- Floral Greens and other plant products

### Readings

- Ballard, H., & Huntsinger, L. 2006. Salal harvester local ecological knowledge, harvest practices and understory management on the Olympic Peninsula, Washington. *Human Ecology*, 34:529-547.
- Eastman, B. A Fern.
- Kimmerer, R. 2003. The Web of Reciprocity: Indigenous Uses of Moss. In *Gathering moss: A natural and cultural history of mosses*. Corvallis: Oregon State University Press. Pp 100-110.
- Yamane, L. 2001. My world is out there. In Hogan, L & Peterson, B., eds. The sweet breathing of plants. New York: North Point Press. Pp 59-65.

### Wednesday November 16th

- Plants Used in Arts and Crafts
- Guest presenter

## Readings

- Mercer, Bill. 2007. Current art forms: Basketry. In Berg, Laura, ed. The First Oregonians. Portland, OR: Oregon Council for the Humanities. Pp. 272-273.
- Schlick, M.D. 1994. Wap'at: the Art of Basket Weaving. In *Columbia River Basketry: Gift of the Ancestors, Gift of the Earth.* Seattle: University of Washington Press. Pp. 2-23.
- Mathewson, Margaret. California Indian Basketweavers and the Landscape. In Judith Li, Ed., To harvest: To hunt- stories of resource use in the American West. Corvallis: OSU press.

## Week Nine: The Economics of Harvesting

#### Monday November 21st

Informal Economies, Commodity Chain Analysis, Domestic Markets

#### Readings

- Turner, N.J. & Loewen, D.C. 1998. The Original "Free Trade": Exchange of Botanical Products and Associated Plant Knowledge in Northwestern North America. *Anthropologica*. p. 49-70.
- von Hagen, B. & Fight., R.D. 1999. Opportunities for conservation-based development of nontimber forest products in the Pacific Northwest. Gen. Tech. Rep. PNW-GTR-473. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 18 p.
- Alexander et al. 2002. Domestic Trade. In: Jones, E. T., McLain, R. & Weigand, J. (Eds.),
   *Nontimber Forest Products in the United States*. Lawrence, Kansas: University of Kansas Press. Pp. 127-137.

## Wednesday November 23rd

- Livelihood Strategies and Quality of Life Issues
- Case Study Analysis: Huckleberries

#### Readings

- Jones, Eric T. and Kathryn A. Lynch. 2002. Excerpt from The Relevance of Sociocultural Variables to Nontimber Forest Product Research, Policy, and Management. In Jones, Eric T., Rebecca J. McLain and James Weigand, eds. 2002. *Nontimber Forest Products in the United States*. Lawrence: University Press of Kansas. Pp. 38-42.
- Atlee, Tom. 2005. Up Is Not Always Up. http://www.co-intelligence.org/y2k\_upnotup.html
- Richards, Rebecca T. and Susan J. Alexander. 2006. A Social History of Wild Huckleberry Harvesting in the Pacific Northwest. Gen. Tech. Rep. PNW-GTR-657. Portland, OR: USDA, Forest Service, Pacific Northwest Research Station. Pp. Ch. 3,4,5,6.

## Week Ten: Wrap Up

### Monday, November 28th

Final Presentations

### Wednesday November 30th

- Final Presentations
- Last Class Wrap-Up. Final Evaluations.
- Exam Review
- Turn in Journals and Final Projects

Final Exam: Thursday December 8th, 10:15 AM