

# ENVS 425/525: Environmental Education in Theory & Practice

CRN 22571/27043, Winter 2012, Tues/Thur, 2:00-3:50 pm, 142 Columbia Hall

|  |                  |  |              |  |
|--|------------------|--|--------------|--|
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## Course Overview

This class is the first quarter of the Environmental Leadership Program's two-quarter Environmental Education Initiative. During the winter we will explore various educational theories and see how environmental education is practiced in Oregon, nationally and around the globe. This year the theme we are focusing on is the relationship between people and plants. This year we are also paying special attention to the integration of storytelling and "questing" into environmental education. You will work in teams to apply your skills, strengths and creativity towards developing educational materials that will make a difference in our community and the world. Then during spring term you will deliver your environmental education program – in the classroom and/or in the field. This year the teams and community partners are:

Canopy Connections – H.J. Andrews Experimental Forest and Pacific Tree Climbing Institute  
Exploring Ethnobotany – Adams Elementary School  
Native Naturalists, "Stalking the Wild Camas" Quest – Mt. Pisgah Arboretum

## Course Format & Philosophy

The Environmental Leadership Program is a service-learning program. Our goal is to create meaningful learning experiences that not only help you build your knowledge and skills, but that also make a difference in our community. Active, engaged participation is central to this class, so if you prefer passive learning, 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 making learning fun. We, as a group, 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 and to help build a positive, safe, learning environment. In the end, we hope you all are inspired and "willing to act for the common good and capable of doing so effectively" (Colby 2003:7).

## Learning Objectives

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

- Discuss the history and goals of environmental education.
- Plan, implement and evaluate multiple methods for teaching about environmental issues.
- Develop an educational unit for a community partner that is appropriate for your audience, meets state standards and responds to community partner's needs and expectations.
- Work more effectively in a team.

### Required Reading & Materials

- ❑ Jacobson, Susan K., Mallory D. McDuff and Martha C. Monroe. 2006. *Conservation Education and Outreach Techniques*. Oxford: Oxford University Press.
- ❑ Louv, Richard. 2006. *Last Child in the Woods. Saving our Children from Nature-Deficit Disorder*. NC: Algonquin Books of Chapel Hill.
- ❑ Various articles which are available on the class website.
- ❑ Field notebook (recommended: Strathmore 8.5 x 11.5 inch hardbound sketchbook)
- ❑ Drawing, painting, writing tools (e.g. ink pens, pencils, erasers, watercolor pencils, brushes, pencil case/box, land lens, binoculars, and a bag to keep it all in)

### Recommended:

- ❑ Clark, Delia and Steven Glazer. 2004. *Questing. A Guide to Creating Community Treasure Hunts*. Hanover and London: University Press of New England.
- ❑ Tomlinson, Susan Leigh. 2010. *How to Keep a Naturalist's Notebook*. Mechanicsburg, PA: Stackpole Books.
- ❑ Sobel, David. 1996. *Beyond Ecophobia: Reclaiming the Heart in Nature Education*. Nature Literacy Series. Great Barrington, MA: The Orion Society.
- ❑ Young, Jon, Ellen Haas, and Evan McGown. 2010. *Coyote's Guide To Connecting with Nature*. 2nd Ed. Shelton, WA: Owl Link Media Corporation.
- ❑ Pojar, Jim and Andy MacKinnon, eds. 1994. *Plants of the Pacific Northwest Coast*. Vancouver, British Columbia: Lone Pine Publishing.

### Course Requirements

#### **1. Participation (10%)**

Due to the participatory nature of this class, absences are impossible to “make-up” and thus inherently will affect your grade. Your participation grade includes completing all the assigned reading, coming to class on-time prepared to discuss the materials in an analytical manner, and active engagement in class activities.

Participation also includes facilitating a group discussion. Each team is assigned to a different week and as a team you will decide how to organize the discussions, including how to divide your team so that half of the team leads the Tuesday discussion and the other half leads on Thursday. You will develop a lesson plan that outlines your plan for the discussion, the techniques/ methods you will use and the specific questions that will guide your discussion. You should plan ahead so that you can get feedback on your plan prior to your class facilitation! The schedule is:

- Week 4: Canopy Connections
- Week 5: Exploring Ethnobotany
- Week 6: Native Naturalists, “Stalking the Wild Camas” Quest

We also have several required field trips:

- 1) Saturday Jan. 21: Canopy Connections to HJ Andrews Experimental Forest
- 2) Saturday Jan. 28: Native Naturalists and Exploring Ethnobotany to Mt. Pisgah
- 3) Sat- Sun Feb 4-5: Everyone to the coast for a Project Learning Tree certification workshop, and to see EE in action on the coast at South Slough. Tidepooling too!

## 2. Field Observation Notebooks (15%)

You will be honing your observation skills by keeping a weekly field journal. In our hectic lives, we don't often have the luxury to slow down and observe the beauty of nature around us. A good educator has the ability to inspire wonder, and help kids slow down and notice the brilliance in the details, in the tiny goings-on. This assignment creates space to develop these skills. Please bring your field notebook and pens/pencils to class everyday – and on all fieldtrips – as we will be actively using them! Please see the course website for a handout that provides greater details on the requirements for this assignment.

## 3. Weekly critical reviews of reading (20%)

Learning how to actively engage with the materials you read is a skill that takes practice. The goal of this assignment is to make you a better critical thinker and to encourage you to be an active, engaged reader. A bonus of this assignment is that you will be better prepared for class discussions and the midterm exam and it will be a skill that you can apply in other classes and throughout your life!

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

- 1) Read for and summarize more effectively the main “take-home points” an author is making, and
- 2) More confidently engage in dialogue with the material you read, questioning both its accuracy and relevance.

To reach these objectives, you will prepare five short (~2 pages) reaction paper to the readings. These reaction papers should be typed, 1.5 spacing, 11 pt font, spell-checked, and well-written. Reaction papers should address the readings assigned for Tuesday, and should follow this format:

1) **Main points:** write a paragraph summarizing the main thesis, argument or key points of the readings. In effect, you are writing an annotation. This should serve you well for later studying, since this overview should concisely highlight the key “take home points” of the readings. This paragraph is a summary of what positions, statements, arguments were made. Please note, most weeks you will have more than one reading and your review should discuss all the readings. Be sure to use references so that it is clear which reading(s) you are discussing. (Example: Jacobson et al. (2006: 12-21) present a convincing case for the necessity of thoughtful and systematic planning).

2) **Relevance to my ELP team:** write a paragraph or two of your ideas on how this information is relevant to your project and how you might apply this in your project.

3) **My thoughts and reactions:** This is where the “critical” part of your review comes into play. “Critical” does not translate as being “negative” or “mean.” Rather, thinking critically means you actively engage with the intellectual arguments being put forth. It means you spend time contemplating what you're reading, considering whether or not it meshes with other readings you've done and with your own life experiences. What do you think about the theories or methods discussed in the readings? Did they lead to any new insights? Do they reflect your own experiences? Are there issues you feel were not adequately addressed? Arguments or positions not fully developed or with holes? Do you have any concerns? Did you find the readings interesting or useful? If so, or if not, discuss why. Here is a place to interact with the author, responding to the arguments they put forth.

4) **My Question(s):** This section should include a) any questions you have about the readings, and b) a provocative question for inclusion in the class discussion. Think about this for a bit! This should be a question that stimulates class discussion. (Thus, yes/no questions are not what I am looking for!) Good

questions draw from the materials you read, help you analyze and synthesize the various readings and/or help you think about how to apply the material in new contexts. Think of this as an opportunity to be the teacher, and to develop a question that will spark good conversation about the readings to help the class better understand the key concepts and points of the readings.

A total of **five** reviews are required, although there are six opportunities to submit critical reviews. Your six options are: Monday 1/16, 1/23, 1/30, 2/6, 2/13, 2/27. I designed it this way to give you some flexibility and freedom of choice. You pick which five weeks you wish to submit reviews, (or submit all six and I will drop the one lowest grade and give you one extra credit point). Note: You are still expected to thoughtfully engage with the readings even on the days you don't write reviews and if I suspect you aren't, I reserve the right to give pop quizzes! You should email your reviews to Devon and Katie by noon on Monday.

#### **4. Midterm Exam (15%)**

There will be an in-class exam on Thursday February 23<sup>rd</sup>, 2012. This exam will cover key concepts discussed in the reading and in class. The objective is to assess your ability to apply what you have learned so far. You should take this opportunity to impress us with your insights into the key points from the readings. Citing authors and specific articles is one savvy way to demonstrate a working knowledge of the materials. The format will be short answers with 1 essay question.

#### **5. Environmental Education Package (40%) Due during Week 10**

This is where you get to apply what you are learning and tap into your creative energies to develop innovative, engaging, interesting educational materials! As mentioned above, your group project has been designed in collaboration with various community partners in order to benefit the wider community. Thus, the goal of your group project is to produce professional quality educational materials that you and these organizations will be able to use in the future. Working in your teams, you will be researching and developing education and outreach materials. You will complete weekly worksheets to keep you on track. Please see the Group Project Assignment handout posted on the website for all the details! The exact final product will vary based on the needs of your partner, the audience, the location, etc. We will talk a lot more about this in class. At the end of the term, each team will pilot their lesson plans and undergo a peer review process. Your final group project is due Thursday March 22<sup>nd</sup> at 3:00 pm. Please email final documents to both Katie and Devon.

#### Grading

In the service of fairness, late assignments will drop a letter grade each day until submitted. Sorry, but no exceptions unless you have an excused medical reason (with a note from the student health center) or have made pre-arrangements with me. We are working with community partners and it is critical we meet all our deadlines to maintain good relations! Incompletes are not available for this class.

#### A note on access:

If you have a disability (physical or learning) which you think may affect your performance in this class, please see me during the first week of the term so we can make arrangements, if necessary, for your full access to all classroom activities.

#### A note on academic honesty:

I take this very seriously. 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 in the Schedule of Classes. If you are caught for plagiarism or cheating, you will receive an F for the course and I will refer the case to the Office of student Judicial Affairs. Please see me if you have any questions about your use of sources.

The following overview provides a quick glance at the progression of our class and your team project. Since we are tackling a new challenge this year (plants and people), with a new method (quests), we may need to make some minor tweaks to the assignments and/or due dates. Keep me posted how things are going, and I will check in with you too, and we can make revisions as needed.

| Wk   | Class Theme/Activities  | What you should be working on (team project assignments)                               | Due Date             |
|--|---|--|----------------------|
| 1  | Tues: Introductions and course overview   | <i>Worksheet #1</i> : Section 1.3.1.<br>Prep for community meeting                     | Thurs 1/12           |
|  | Thur: Community partner presentations & work session                                | <i>Worksheet # 1</i> : Define mission, goals of partners, term norms, etc.             | Thurs 1/19           |
| 2  | Tues: Defining EE, theory behind learning & teaching                                | <i>Worksheet #2</i> : Applying theory to develop our EE framework                      | Tues 1/24            |
|  | Thur: Field journals - cultivating the art of observation and lesson planning.      | Tomlinson journaling exercises & <i>Worksheet # 3</i> : Background Research            | Tues 1/31            |
| <b>*Sat. Jan. 21<sup>st</sup>: Fieldtrip to HJA for Canopy Connections</b>                               |   |  |                      |
| 3  | Tues: Underlying Principles.<br>Focus on skills: Facilitation                       | <i>Worksheet # 3</i> : Research (cont)<br><i>Worksheet # 4</i> : Articulating concepts | Tues 1/31            |
|  | Thurs: Lesson planning – learning objectives and state standards                    | <i>Worksheet # 5</i> : SMART objectives<br><i>Worksheet # 6</i> : State standards      | Tues 2/7<br>Tues 2/7 |
| <b>*Sat. Jan. 28<sup>st</sup>: Fieldtrip to Mt. Pisgah for Exploring Ethnobotany, Native Naturalists</b> |   |  |                      |
| 4  | Tues: Making it Come Alive -- Selecting activities                                  | <i>Worksheet # 7</i> : Selecting activities, creating planned beginnings & ends        | Tues 2/14            |
|  | Thurs: Integrating the arts into EE programs  | Details of your quest  |                      |
| <b>*Sat. Feb 4-5th: Weekend Coast FIELD TRIP!</b>  |   |  |                      |
| 5  | Tues/Thurs: Integrating Questing to make learning fun! (poetry and maps!)           | <i>Worksheet 8</i> : Writing clues<br><i>Worksheet 9</i> : Making your map             | Tues 2/21            |
| 6  | Tues/Thurs: Assessment and Evaluation of EE   | <i>Worksheet 10</i> : Developing authentic assessment tools                            | Tues 2/21            |
| 7  | Tues: Bringing it all together – draft presentations                                | Present drafts to class  | Tues 2/21            |
|  | Thurs: Midterm exam   | -  | Thurs 2/23           |
| 8  | Children, Nature and Nature Deficit Disorder  | Revisions and final formatting your Quest/lessons                                      | n/a                  |
| 9  | Environmental Education in Practice – Professional Opportunities & Responsibilities | Finishing touches, collecting materials needed, team run-through                       | n/a                  |
| 10   | Tues: Exploring Ethnobotany pilots in class   | Final revisions based on feedback.   | Tues 3/13            |
|  | Thurs: Exploring Ethnobotany pilots in class  |  | Thur 3/15            |
|  | Fri: Native Naturalists pilot, 1-4, Mt. Pisgah                                      |  | Fri 3/16             |
|  | Sat: Canopy Connections pilot, 8-4, HJA   | (weather permitting)   | Sat 3/17             |
| Finals   | Thurs. March 22 <sup>nd</sup> : 1- 3 pm: (additional pilot time for Adams team?)    | Final materials due by 3pm today.  | Wed 3/22             |

## Schedule of Topics, Reading Assignments & Activities

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### **Week One: Introductions and Overviews**

#### Tuesday January 10<sup>th</sup>

- Intro Quest! and course overview.
- Group discussion: plant nomenclature, cultural sensitivity, and communicating cultural information accurately.
- Setting class norms

To prepare for your meeting with your community partner on Thursday, please read:

- Jacobson et al. 2006. Chapter 1: Designing successful conservation education and outreach. Pp. 7-23.
- Clark, Delia and Steven Glazer. 2004. Introduction and Ch. 1 – The Joy of Treasure Hunts. In *Questing. A guide to creating community treasure hunts*. Hanover: University Press of New England. Pp. 1-17.
- Community partner websites.

#### Thursday January 12<sup>th</sup>

- Community partner presentations – Introduction to partners and projects.
  - Team planning session # 1: defining mission and goals of organization. (You are interviewing your community partners, so please come prepared to take advantage of this meeting and get the information you need to begin your project!)
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### **Week Two: Underlying Principles, Building a Foundation**

#### Monday January 16<sup>th</sup>, noon

- Critical review #1 (of Tuesday's reading) due

#### Tuesday January 17<sup>th</sup>

- Group discussion of readings
  - ➔ Stapp, William B., et al. 1969. The Concept of Environmental Education. Pp. 33-36.
  - ➔ Jacobson et al. 2006. Chapter 2: Learning and teaching with adults and youth. Pp. 35-62.
  - ➔ Louv. 2006. Ch. 6. The Eighth Intelligence. Pp. 71-85.
- Energizer Activity: "Go to your (Intelligence) Post"
- Team planning session #2: Using theory to improve our EE projects.

#### Thursday January 19<sup>th</sup>

- Worksheet # 1 due by 2pm.
- Read The Cricket Story, adapted by Rona Leventhal, from *Spinning Tales, Weaving Hope*. P. 201.
- Group discussion of readings
  - ➔ Moore, Kathleen Dean. 1995. Winter Creek. *Riverwalking. Reflections on Moving Water*. San Diego: Harcourt Brace & Co. Pp. 31-37.
  - ➔ Moore, Kathleen Dean. 2004. Late Night Listening. *The Pine Island Paradox. Making Connections in a Disconnected World*. Minneapolis, MN: Milkweed Editions. Pp. 50-55.
  - ➔ *Coyote's Guide*. Pp. 28-33 (Awakening Sensory Awareness); Pp. 35-40 (Sit Spot); Pp. 63-66 and 325-330 (Journaling).
  - ➔ Tomlinson. The Daily Log. Pp. 124-129; and Descriptive Notes. Pp.136-138.
- Journaling activities.
- Team planning session # 3: Lesson Plans and Worksheet # 3: Background. You need to research your site to start defining the content of your lessons.

**FIELDTRIP: Canopy Connections to H.J. Andrews**

Saturday January 21st

Time: Leave Eugene 9:00am from Onyx Bridge – back by 4:00pm

Place: H.J. Andrews Experimental Forest, about 1 hour up the McKenzie Highway near Blue River.

Focus: Develop familiarity with field site, plants, and basic forest biology.

Facilitators: Katie Lynch and Alan Dickman.

Notes: Please come prepared for the weather. Boots, wool clothing, hats, gloves, and snow/raingear! Also bring snacks, lunch and water. And field notebooks are an absolute must!

Before this fieldtrip, please check out the HJA website.

Activities developed from Clark, Delia and Steven Glazer. 2004. Ch. 7: Out in the Field and Ch. 8: Researching Your Place. *Questing. A guide to creating community treasure hunts*. Hanover: University Press of New England. Pp. 99-136.

Anyone else in the class wishing to participate in this fieldtrip, please let us know by 1/12/12.

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**Week Three: Underlying Principles, Building a Foundation (cont)**

Monday January 23<sup>rd</sup>, noon

- ➡ Critical review #2 (of Tuesday's reading) due

Tuesday January 24<sup>th</sup>

- ➡ Worksheet # 2 due.
- ➡ Field notebooks – sharing reflections.
- Group discussion of readings
  - ➡ Sobel, David. 1996. *Beyond Ecophobia: Reclaiming the Heart in Nature Education*. Nature Literacy Series. Great Barrington, MA: The Orion Society.
  - ➡ hooks, bell. 1994. Ch. 1: Engaged pedagogy. In *Teaching to Transgress. Education as the Practice of Freedom*. NY: Routledge. Pp. 13-22.
  - ➡ hooks, bell. 1994. Chapter 3: Embracing change – teaching in a multicultural world. In *Teaching to Transgress. Education as the Practice of Freedom*. NY: Routledge. Pp. 35-44.
  - ➡ Cole, Anna Gahl. 2007. Expanding the Field: Revisiting Environmental Education Principles Through Multi-disciplinary Frameworks. *Journal of Environmental Education*. 38(2):35-46.
- Tomlinson. Step 1: Simple Shapes. Pp 23-29 and Step 2: Proportion. Pp. 29-33. (not part of critical reviews)
- Focus on skills: Facilitation.
- Team planning session # 4: Articulating concepts.

Thursday January 26<sup>th</sup>

- Group discussion of readings:
  - ➡ North American Association for Environmental Education (NAAEE). *Guidelines for Excellence*. Pp. 1-6.
  - ➡ Oregon Dept. of Education. 2009. Standards By Design: Standards for Science and Social Sciences *(each team should read the appropriate standards for the audience they will be working with and highlight at least two standards that might be appropriate for your lessons!)*.
  - ➡ Jacobson et al. 2006. Ch 1, P.14 (SMART objectives), and Ch. 4, Section 4.3, Pp. 103-108. (Standards)
  - ➡ Orlich, Donald C., et al. 2007. Section 3: Using Objectives to Guide Learners. In *Teaching Strategies. A Guide to Effective Instruction*. Boston, MA: Houghton Mifflin Co. Pp. 79-81, 85-86, 87-89, 92-93, 122-123.
  - ➡ Clark, Delia and Steven Glazer. 2004. “Use Questing to Accomplish Your Goals”, and “Considering Your Place.” In *Questing. A guide to creating community treasure hunts*. Hanover: University Press of New England. Pp. 24-26, 30-41.
  - ➡ Tomlinson. pgs.36-45 (Drawing from Photos).
- Team planning session # 5-6: Defining SMART objectives and state standards

**FIELDTRIP: Native Naturalists (and some Adams team?) to Mt. Pisgah**

Saturday January 28th

Time: Leave Eugene 9:00am from Onyx Bridge – back by 4:00pm

Place: Mt. Pisgah Arboretum

Focus: Develop familiarity with field site, plants, and determine routes for Quests.

Facilitators: Katie Lynch and Devon Bonady.

Notes: Please come prepared for the weather. Boots, wool clothing, hats, gloves, and snow/raingear! Also bring snacks, lunch and water. And field notebooks are an absolute must!

Before this fieldtrip, please check out the Mt. Pisgah website.

Activities developed from Clark, Delia and Steven Glazer. 2004. Ch. 7: Out in the Field and Ch. 8: Researching Your Place. *Questing. A guide to creating community treasure hunts*. Hanover: University Press of New England. Pp. 99-136.

Anyone else in the class wishing to participate in this fieldtrip, please let us know 1/12/12.

**Week Four: Planning and Implementing EE**

Monday January 30<sup>th</sup>, noon

➡ Critical review #3 (of Tuesday's reading) due

Tuesday January 31<sup>st</sup>

➡ Journal check today

● Group discussion of readings: (Facilitated by Canopy Connections)

➡ Jacobson et al. 2006. Chapter 5: Making conservation come alive. Pp. 132-173.

➡ Jacobson et al. 2006. Excerpt from Chapter 12: Designing on-site activities. Pp. 405-412.

➡ Coyote's Guide, p. 41-44 (Story of the Day) and Pp. 105-116 (Storytelling); p. 79-86 (Child's Passions)

➡ Cooper, James M., ed. 2006. What is a planned beginning./ What is a planned ending? In *Classroom Teaching Skills*. 8<sup>th</sup> Ed. Boston, MA: Houghton Mifflin Co. Pp. 80-81, 94-96, 98-99.

➡ Tomlinson, Pp. 47-51 (Color Exercises), Pp. 52-55 (Line Exercises).

● Team planning session # 7: Selecting activities. Planned beginning/ends.

Thursday February 2<sup>nd</sup>

➡ Standards and SMART learning objectives worksheets due.

● Group discussion of readings: (Facilitated by Canopy Connections)

➡ Clark, Delia and Steven Glazer. 2004. Ch 5. Varieties of Quests and an example "The Miraculous Tree Quest". In *Questing. A guide to creating community treasure hunts*. Hanover: University Press of New England. Pp. 61-79, 109-113.

➡ Tomlinson, Pp. 55-60 (Fill the page).

● Team planning session # 7 (cont): articulating the details.

**FIELDTRIP: Environmental Education in Practice – coastal case studies**

Saturday February 4 – Sunday February 5

Time: Leave Eugene 9:00am Saturday – Back by 5:00pm Sunday.

Place: We will visit Cape Arago and Sunset Bay State Parks, South Slough National Estuarine Research Reserve and Oregon Institute of Marine Biology. We will camp at South Slough.

Focus: EE on the Oregon Coast

Facilitators: Joy Tally, South Slough.

Notes: Please come prepared for the weather. Boots, wool clothing, hats, gloves, and raingear!

Before this fieldtrip, please check out the South Slough website: <http://www.oregon.gov/DSL/SSNERR/>  
(read PreK-12 Programs)

Saturday night: Many of you have experience facilitating EE programs. If you have any favorite techniques/games/stories, feel free to share them tonight. Sign up beforehand.

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### **Week Five: Making your EE lessons/quest come alive!**

Monday February 6<sup>th</sup>, noon

- ➡ Critical review #4 (of Tuesday's reading) due

Tuesday February 7<sup>th</sup>

- ➡ Background and rationale sections due.
- Group discussion of readings: (Facilitated by Exploring Ethnobotany)
  - ➔ Jacobson et al. 2006. Ch. 6: Using the arts for conservation, 174-208.
  - ➔ Clark, Delia and Steven Glazer. 2004. Ch 9 – Writing Clues. *Questing. A guide to creating community treasure hunts*. Hanover: University Press of New England. Pp. 137-154.
  - ➔ Tomlinson, Pp.61-64 (Use frames).
- ➔ Team planning session # 8: Writing clues.

Thursday February 9<sup>th</sup>

- Group discussion of readings: (Facilitated by Exploring Ethnobotany)
  - ➔ Excerpt from Ch. 7: Connecting classes and communities with conservation. Pp. 241-249 (maps).
  - ➔ Clark, Delia and Steven Glazer. 2004. Ch 10- Making Maps. *Questing. A guide to creating community treasure hunts*. Hanover: University Press of New England. Pp. 155-171.
  - ➔ Coyote's Guide, Pp. 58-61 (Mapping); p. 321 (Mapping Sit Spot)
  - ➔ Tomlinson, Pp. 142-147 (Maps).
- Team planning session # 9: Making maps.

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### **Week Six: Assessment and Evaluation**

Monday February 13<sup>th</sup>, noon

- ➡ Critical review #5, (of Tuesday's reading) due

Tuesday February 14<sup>th</sup>:

- ➡ Activities section due today.
- Midterm check-in (modeling assessment techniques)
- Group discussion of readings: (Facilitated by Native Naturalists)
  - ➔ Jacobson et al. 2006. Section 1.5: Evaluation. Pp. 24-34.
  - ➔ Clark, Delia and Steven Glazer. 2004. Ch 11: Treasure Boxes, Stamps and Sign-in Books and Excerpt from Ch. 12. In *Questing. A guide to creating community treasure hunts*. Hanover: University Press of New England. Pp.172-188 and P.191.
  - ➔ TenBrink, T. and Cooper, James M. 2003. *An Educator's Guide to Classroom Assessment*. Boston, MA: Houghton Mifflin Co. Pp. 33-34.
  - ➔ Tomlinson, Pp.75-81 (Tips and drawing trees).
- Team planning session # 10: Developing Authentic Assessment Tools.

Thursday February 16<sup>th</sup>

- Group discussion of readings: (Facilitated by Native Naturalists)
  - ➔ Marcinkowski, Thomas. 1998. Assessment in Environmental Education. in *Environmental Education Teacher Resource Handbook*. Kraus International Publications in Association with the National Science

Teachers Association. You can skim sections I, IV, but check out section IV for ideas on how to really assess if you've successfully brought your students from Awareness to Action.

- ➔ Environmental Literacy Council. 2008. Assessments. <http://www.enviroliteracy.org/article.php/1185.html>  
Read about rubrics.
  - ➔ Cooper, James M. and Terry D. TenBrink. 2003. *An Educator's Guide to Classroom Assessment*. Boston, MA: Houghton Mifflin Co. Pp. 33-34.
  - ➔ Tomlinson, Pp.82-85 (Drawing wildflowers).
  - Focus on skills: Developing assessment tools.
  - Focus on skills: Effective presentations. Review format for next Tuesday presentations.
  - Group review: Why exams? Why evaluate? How to prepare for the midterm and a short review session for clarifications and questions.
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### **Week Seven: Bringing It All Together**

#### Tuesday February 21<sup>st</sup>

- ➔ Complete lesson plans due today.
- ➔ Team presentations and peer reviews.
- ➔ Post materials on class website for peer review process and share with community partner.

#### Thursday February 23<sup>rd</sup>

- ➔ In-class exam.
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### **Week Eight: Children, Nature and Nature Deficit Disorder**

#### Monday February 27<sup>th</sup>, noon

- ➔ Critical review #6 (of Tuesday's reading) due

#### Tuesday February 28<sup>th</sup>

- ➔ Field notebooks – sharing reflections.
- ➔ Group discussion of readings
  - ➔ Louv, R. 2006. Introduction, Ch. 7 and Ch. 8. In *Last Child in the Woods. Saving our Children from Nature-Deficit Disorder*. NC: Algonquin Books of Chapel Hill. Pp. 1-4, 86-98, 99-112.
  - ➔ Louv. 2006. Ch. 16: Natural School Reform. Pp. 203-226.
- ➔ Review midterm exam.

#### Thursday March 1<sup>st</sup>

- Group discussion of readings:
  - ➔ Louv. 2006. Ch. 11: Don't know much about natural history: education as a barrier to nature. Pp. 133-145.
  - ➔ Louv. 2006. Ch. 12: Where will future stewards of nature come from? Pp. 146-159.
  - ➔ Buhner, Stephen Harrod. 2002. The Separation of Children from the Aliveness of the World. In *Lost Language of Plants*. White River Junction, VT: Chelsea Green Publishers. Pp. 75-77.
  - ➔ Skim website for No Child Left Inside: [www.eenclb.org](http://www.eenclb.org)
  - ➔ Monke, L. 2005. Charlotte's Webpage. *Orion* (Sept/Oct).  
<http://www.orionmagazine.org/index.php/articles/article/159/>
- Focus on skills: Group dynamics role-play activity.
- Focus on skills: managing kids.

(Public Interest Environmental Law Conference March 1-4, UO Law School)

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### **Week Nine: EE in practice: Professional responsibilities, professional opportunities**

Tuesday March 6<sup>th</sup>:

- Guest speaker – Environmental Education in Practice with Beth Stein, Program Director, Nearby Nature.
- Group discussion of readings: (Katie)
  - ➔ Nearby Nature website: <http://www.nearbynature.org/>
  - ➔ NAAEE website – browse to get a feel for this organization, what they have to offer.
  - ➔ The Environmental Literacy Council website. <http://www.enviroliteracy.org/index.php> (skim for info)
- Implementation session # 1: Effective presentation skills and giving directions.
- Pilot Test with your team. (homework, not in class)

Thursday March 8<sup>th</sup>:

- Guest speakers – Whole Earth Nature School
- Group discussion of readings:
  - ➔ Fried, Robert. 2004. The heart of the matter. In *Kaleidoscope. Readings in Education*. 10<sup>th</sup> ed. Ryan, Kevin and James M. Cooper, eds. Boston, MA: Houghton Mifflin Co. Pp. 15-17.
  - ➔ Environmental Education Association of Oregon website: <http://www.eeao.org/>

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### **Week Ten: Lesson Plan Pilot Presentations – Open to the Public**

During this week teams will do a run-through of their fieldtrip/lesson plans. Each team will also participate in and peer review one other team, providing critical constructive feedback on how the unit can be improved (Although you are encouraged to attend them all!) Community partners are invited to this pilot.

Tuesday March 13<sup>th</sup>: In class presentations

- ➔ Exploring Ethnobotany presents (one lesson for 1<sup>st</sup> and one lesson for 2<sup>nd</sup> grade)

Thursday March 15<sup>th</sup>: In class presentation

- ➔ Exploring Ethnobotany presents (one lesson for 3<sup>rd</sup> and one lesson for 4<sup>th</sup> grade)

Friday March 16<sup>th</sup>

- ➔ Native Naturalists team presents their Quest at Mt. Pisgah Arboretum, 1-4pm.

Saturday March 17<sup>th</sup>, depending on snow, or first two weeks of spring term

- ➔ Canopy team presents their fieldtrip at HJA, 9-3pm.

Thursday March 22<sup>nd</sup>: In class presentation during Final Exam period, 1-3pm

- ➔ Exploring Ethnobotany presents (one lesson for 5<sup>th</sup> and any additional if desired?? Earlier? Let's talk about this.)

- ➔ **COURSE EVALUATIONS:** On-line course evaluations close midnight on Sunday prior to the beginning of final exams. Please share your insights, constructive feedback and input on this course this weekend!

**Final Exam Period: Thursday March 22<sup>nd</sup>, 1:00 - 3:00 pm. Final project due at 3pm!**