

# Exploring Iowa's Natural Resources On-line Course

## Syllabus/Outline

### February 15 – May 9, 2009

#### Facilitator

Charlene Elyea

Phone: 712/728-3426

Emails checked daily, Monday through Friday

#### Course Description

The goal of this course is to help you incorporate local natural resources into your curriculum. You will work in small groups and individually to create a network of contacts and resources to teach about natural resources. Group and individual assignments will build on each other each week.

#### Course Objectives

Participants completing this course will:

1. Become more knowledgeable about local natural resources and issues facing them.
2. Increase knowledge/skills on finding credible electronic resources.
3. Compile a list of local natural resources areas and contacts.
4. Develop a topical unit that meets their specific teaching needs.
5. Be acquainted with a variety of additional resources to enhance their personal knowledge of Iowa's natural resources and issues facing them.

#### Course Requirements

The course is arranged on a weekly basis – Monday through Sunday. Each week you will have a new Module of required readings, resources and references, assignments, and occasional guest speaker discussions. Assignments will be available at 12:00 a.m. on Mondays and must be completed by 11:00 p.m. on Sunday. You will only have access to the current Module. (See the Assignment Schedule, pages 4 – 6 of this document, for a complete list of assignments.) If you are unable to complete assignments by the due date, email your instructor immediately. Ten percent per day will be deducted for late assignments.

#### Participation Policy

Routine and active participation is expected of all students. You are required to spend 5- 6 hours per week on-line completing assignments and participating in group discussions. If special circumstances or emergency situations arise that will affect your course involvement, please let your instructor know immediately.

#### Reasonable Accommodation

Students who have a documented disability or special needs should notify the instructor during the first week of class of any accommodations needed for the course.

#### Course Materials

*Project WILD K-12 Activity Guide* (provided on course CD)

*An Iowa Supplement to Project WILD* (provided on course CD)

*Project WILD Aquatic K-12 Activity Guide* (provided on course CD)

*An Iowa Supplement to Project WILD Aquatic* (provided on course CD)

Learning Resources for *Project WILD Aquatic* (posters, handouts, CD)

*Beyond Ecophobia: Reclaiming the Heart in Nature Education* by David Sobel

*Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder* by Richard Louv

## **Navigating the Course CD**

To start browsing the content on the CD, double click the “start.pdf” file in the top-level directory of the CD. This is the Main Menu page. The Main Menu is a good place to start your exploration of the CD - you can choose which *Supplement* or *Activity Guide* you want or check out the “Additional Materials.”

The files on the Course CD are linked, much like web pages. There are two types of links:

- **Red links** take you to other resources on the CD. These include links to Units within each Supplement and between Supplements, activities, and appendices.
- **Blue links** take you to relevant websites, if you are connected to the internet.

The quickest way to move through the *Project WILD Aquatic* or *Project WILD Activity Guides* is to use the bookmarks on the left hand side. The activities are listed alphabetically within the three sections. The appendices are also arranged alphabetically. If you accidentally close the bookmark tab, click on "Bookmarks" and the tab will reopen.

It's easy to follow links until you are thoroughly lost among the many documents on the Course CD. To get back to the Main Menu (start.pdf), click on the DNR logo in the upper right corner of each page.

## **Equipment and Software Requirements**

To complete this course you will need a computer with:

- Window or Mac operating system with a WebCT supported browser\*
- Access to the Internet (equipment and software)
- Word processing software
- Modem: minimum 56K; high bandwidth modem better (cable, DSL, satellite)
- CD-ROM or DVD drive

### ***Adobe Acrobat Reader Download***

Most of the files on your course CD are pdf files. You will need *Reader* to view them. These files can be viewed whether you are using a Mac or PC. The type of word processing program (Word, Works, Word Perfect, etc.) doesn't matter either.

You can download *Reader* from the [Adobe web site](#).

## **Group Assignments**

You will work in assigned groups to explore a natural resource topic together. Following is the list of group members:

### **Group A**

### **Group B**

To find out more information about your group members, check out their Student Home Pages.

## Final Project (Topical Unit)

You will create a unit, which you can use in your classroom, based on an environmental topic. You will be assigned tasks throughout the course to help you organize your project. Instructions for these tasks will be provided in your individual assignments.

### Tasks

1. Topic Choice – 10 points
2. Explanation of Topic Choice – 15 points
3. *Projects WILD/WILD Aquatic* Activity Choices (3) – 25 points
4. 3 Resources – 25 points
5. Community Resources – 25 points

You will create lesson plans and additional resources which you can use to teach your final project topic. The criteria for these pieces are listed below.

### Criteria

#### 2 Lesson Plans – 100 points

- Must be submitted in the lesson plan format provided (available in the “Course Information” folder on the Course CD).
- Activities can be from either the *Project WILD Aquatic* or *Project WILD Activity Guides* (or a combination).
- Compile all three lesson plans into one document.
- Post on the “Final Project (topical unit)” Discussion Board. This Discussion Board will be open the entire class.

#### 5 E Learning Cycle– 50 points

- Must be submitted in the 5 E’s: A Model for Designing Lessons for Inquiry Planner template provided (available in the “Course Information” folder on the Course CD).
- Post on the “Final Project (topical unit)” Discussion Board. This Discussion Board will be open the entire class.

#### 2 Additional Resources – 25 points

- Create (in an electronic file) 2 additional resources (e.g., student pages, activity sheets, fact sheets, assessments, PowerPoint presentations) you can use with your lesson plans
- Can be 2 for the same lesson plan or 1 each for 2 lesson plans
- Post on the “Final Project (topical unit)” Discussion Board. This Discussion Board will be open the entire class.

#### Blog Posting – 25 points

- Create (in an electronic file) a blog posting for one of your lesson plans
- Must include:
  - A teaser for your lesson plan activity
  - 5 age appropriate children’s books (use the bibliography format used on our [Exploring Iowa's Natural Resources blog](#))
  - 3 credible web sites for background information
- Post on the “Final Project (topical unit)” Discussion Board. This Discussion Board will be open the entire class.

## Course Grading:

Grades will be assigned using the following point system:

A	90-100% (1700 – 1530)	D	60-69% (1189 – 1020)
B	80-89% (1529 – 1360)	F	below 60%
C	70-79% (1359 – 1190)		

Activity	Points
Introduce Yourself	50
On-line Environment/Technology Quiz	25
Group Assignment #1 –Getting to Know Each Other	25
Facts and Falsehoods Discussion Posting	25
Facts and Falsehoods Discussion Comments	50
Group Assignment #2 – Group Topic Choice	25
Group Assignment #3 –Internet Scavenger Hunt	25
Planning for People & Wildlife Discussion Posting	25
Planning for People & Wildlife Discussion Comments	50
Local Natural Resources Knowledge Quiz	25
<i>Last Child in the Woods</i> Reflection/journal	50
Group Assignment #4 - Profile your community	25
Watershed Discussion Posting	25
Watershed Discussion Comments	50
Blue Ribbon Niche Discussion Posting	25
Blue Ribbon Niche Discussion Comments	50
Guest Speaker Discussion #1	50
Group Assignment #5- Suggest a guest speaker	25
Water Canaries Discussion Posting	25
Water Canaries Discussion Comments	50
Group Assignment #6 - Differentiation in the class room	25
Aquatic Times Discussion Posting	25
Aquatic Times Discussion Comments	50
Wildlife Issues: Community Attitude Survey Discussion Posting	25
Wildlife Issues: Community Attitude Survey Discussion Comments	50
Guest Speaker Discussion #2	50
Group Assignment #7 - blog entry	25
Urban Nature Search Discussion Posting	25
Urban Nature Search Discussion Comments	50
Group Assignment #8 – Extension to blog entry	25
History of Wildlife Management Discussion Posting	25
History of Wildlife Management Discussion Comments	50
<i>Beyond Ecophobia</i> reflection/journal	25
Changing the Land Discussion Posting	25
Changing the Land Discussion Comments	50
Guest Speaker Discussion #3	50
Group Assignment #9 – Research an issue related to the group topic	25
Aqua Words Discussion Posting	25
Aqua Words Discussion Comments	50
Course Evaluation	25
Final Project (topical unit)	300
<b>Total Points</b>	<b>1700</b>

## Assignment Schedule

Dates	Required Readings	Resources & References	Group Assignments	Individual Assignments
<b>Module 1</b> 2/15 – 2/21	<i>Last Child in the Woods</i> Part I Navigating the Course CD Overview of <i>Projects</i> <i>WILD/WILD Aquatic</i> Walk Through the <i>WILD</i> <i>Guides/Supplements</i>	Characteristics of a Successful Distance Learner Core Rules of Netiquette Re-Connecting The World's Children To Nature Taking Inquiry Outdoors: Reading, Writing, & Science Beyond the Classroom Using ENVIRONMENT-BASED Education to Advance Learning Skills and Character Development	1. Getting to Know Each Other	1. Introduce Yourself 2. Final Project Task #1 - Choose a topic 3. Discussion Topic – Facts and Falsehoods 4. Complete the On-line Environment/ Technology Quiz 5. <i>Last Child in the Woods</i> Reflection/ journal
<b>Module 2</b> 2/22 – 2/28	<i>Last Child in the Woods</i> Part II (pages 39 – 69)	ABCs of Website Evaluation Environmental Web Sites Grades Prek-3 Environmental Web Sites Grades 4 - 6 Environmental Web Sites Grades 9 - 12 Important Iowa Conservationists Reflection of Yesterday: Process for Investigating Local History	1. Group Topic Choice 2. Internet Scavenger Hunt	1. Discussion Topic - Planning for People & Wildlife 2. Comment to 2 Facts & Falsehoods Discussion postings 3. Complete the Local Natural Resources Knowledge Quiz 4. <i>Last Child in the Woods</i> Reflection/ journal
<b>Module 3</b> 3/01 – 3/07	<i>Project WILD Aquatic</i> Unit 1: Iowa's Waters <i>Last Child in the Woods</i> Part II (pages 70 – 111)	Give Water a Hand Goin' With the Flow...Involving Students in Hands-on Stream Improvement Projects Inquiry: Thoughts, Views, and Strategies for the K–5 Classroom Understanding Science Inquiry Watershed Mapping	1. Profile Your Community	1. Final Project Task #2 – Explanation of Topic Choice 2. Discussion Topic - Watershed 3. Comment to 2 Planning for People & Wildlife Discussion postings 4. <i>Last Child in the Woods</i> reflection/journal
<b>Module 4</b> 3/08 – 3/14	<i>Project WILD Aquatic</i> Unit 2: Aquatic Life <i>Last Child in the Woods</i> Part III	Biodiversity of Iowa: Aquatic Habitats CD Iowa Waterways Iowa Wetlands		1. Discussion Topic - Blue Ribbon Niche 2. Comment to 2 Watershed Discussion postings 3. <i>Last Child in the Woods</i> reflection/journal 4. Participate in Guest Speaker Discussion

<b>Dates</b>	<b>Required Readings</b>	<b>Resources &amp; References</b>	<b>Group Assignments</b>	<b>Individual Assignments</b>
<b>Module 5</b> 3/15 – 3/21	<i>Project WILD Aquatic Unit 3: The World in a Pond</i> <i>Last Child in the Woods</i> Part IV	Investigating Your Environment: Teaching Materials For Environmental Education IOWATER Benthic Macroinvertebrate Level 1 Key IOWATER Benthic Macroinvertebrate Advanced Key Managing Iowa Fisheries	1. Suggest a Guest Speaker for your Group Topic	1. Final Project Task #3 – <i>Projects WILD/ WILD Aquatic</i> Activity Choices 2. Discussion Topic - Water Canaries 3. Comment to 2 Blue Ribbon Niche Discussion postings 4. <i>Last Child in the Woods</i> reflection/journal
<b>Module 6</b> 3/22 – 3/28	<i>Project WILD Aquatic Unit 4: People, Land, &amp; Water</i> <i>Last Child in the Woods</i> Part V	Common Ground: An Ecological Perspective On Teaching and Learning Exploring Environmental Issues: Biodiversity Iowa Biodiversity	1. How would you apply differentiation in your class room? (eg. TAG, team teaching)	1. Discussion Topic - Aquatic Times 2. Comment to 2 Water Canaries Discussion postings 3. <i>Last Child in the Woods</i> reflection/journal
<b>Module 7</b> 3/29 – 4/04	<i>Project WILD Unit 1: Iowa's Wildlife Resource Base</i> <i>Last Child in the Woods</i> Part VI	Iowa Environmental Laws Iowa Habitat Loss & Disappearing Wildlife Misconceptions about Iowa Wildlife People Communities and their Iowa Environment		1. Discussion topic - Wildlife Issues: Community Attitude Survey 2. Comment to 2 Aquatic Times Discussion postings 3. <i>Last Child in the Woods</i> reflection/journal 4. Participate in Guest Speaker Discussion
<b>Module 8</b> 4/05 – 4/11	<i>Project WILD Unit 2 - Iowa's Wildlife Habitats</i> <i>Last Child in the Woods</i> Part VII	Adapting to Iowa Iowa Mammals Iowa Reptiles and Amphibians Iowa Shrubs and Vines Iowa Spring Wildflowers Iowa Summer and Fall Wildflowers Iowa Trees	Create a blog entry for your Group Topic	1. Final Project Task #4– list three resource for your unit 2. Discussion Topic - Urban Nature Search 3. Comment to 2 Wildlife Issues: Community Attitude Survey Discussion postings 4. <i>Last Child in the Woods</i> reflection/journal
<b>Module 9</b> 4/12 – 4/18	<i>Project WILD Unit 3 - Wildlife Management</i> <i>Beyond Ecophobia: Reclaiming the Heart in Nature Education</i>	Iowa Wildlife Management Keeping Iowa Wildlife Wild	Create an extension to use with the activity you featured in your blog posting	1. Discussion Topic - History of Wildlife Management 2. Comment to 2 Urban Nature Search Discussion postings 3. <i>Beyond Ecophobia</i> reflection/journal
<b>Module 10</b> 4/19 – 4/25	<i>Project WILD Unit 4 - People and Wildlife</i>	Changing Land Use and Values Iowa's Biological Communities Natural Resources Inventory		1. Final Project Task #5 - list community resources (field trips, guest speakers) 2. Discussion Topic - Changing the Land 3. Comment to 2 History of Wildlife Management Discussion postings 4. Participate in Guest Speaker Discussion

Dates	Required Readings	Resources & References	Group Assignments	Individual Assignments
<b>Module 11</b> 4/26 – 5/02		Natural Cycles in Iowa	Research an issue related to your group topic	<ol style="list-style-type: none"> <li>1. Discussion Topic - Aqua Words</li> <li>2. Comment to 2 Changing the Land Discussion postings</li> </ol>
<b>Module 12</b> 5/03 – 5/09				<ol style="list-style-type: none"> <li>1. Comment to 2 Aqua Words postings</li> <li>2. Final Project (topical unit) must be posted</li> <li>3. Complete Course Evaluation</li> </ol>