SYLLABUS: Environmental Education in the School Curriculum
11:704:416
Fall 2012
Wednesdays 2:15-5:00p, Waller Hall Room 203

CONTACT INFORMATION:
Instructor: Rebecca Jordan
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COURSE MATERIALS:
Handouts
Website:
http://sakai.rutgers.edu
To be provided during the course:
Manuals from EE. Orgs.

COURSE DESCRIPTION:
An opportunity to foster ideas and discussion about environmental and scientific literacy while developing plans to target and assess learning goals for all audiences.

COURSE OBJECTIVES:
Participants in this course will:
* Gain insight into both environmental issues and the issues surrounding environmental education
* Develop ways to incorporate environmental education into formal and informal learning environments
* Discuss how to better teach environmental and science literacy and life-long science learning skills

COURSE CONTENT AND OUTLINE:
We will meet for 14 weeks. Attached is a rough schedule of topics.

ASSIGNMENTS/RESPONSIBILITIES & ASSESSMENT:
As an understanding of the complexity and nature of environmental issues is critical to the effective use of environmental issues in science education, students will be held responsible for the environmental content as well as the pedagogical content covered in this course.

Students will be expected to:
• Fill out reflective journal entries and keep a materials binder to help students use materials/skills obtained and learned in this course in future teaching ventures.
• Complete 2 quizzes (dates will be announced-no make-ups w/o prior arrangement)
• Participate in 3 Teaching/Learning projects that combine both and oral and written presentation of material
• Complete 6 single page Assignments
• Final Summative Paper (2 page letter)—In place of a final exam

Assessment Distribution:
Journal (5%) Quizzes (10%), Thought Papers (30%), Projects (50%), Final Paper (5%)

Assessment scale:
All assignments are due at 3 pm on the due date. 5% will be deducted for each day that the assignment is late. No extra credit will be awarded, but students are encouraged to submit work early for initial comments. To be fair, I ask that any requests for a grade change or make-up (projects only and in advance) must be in writing. Grade scale: 100-90%= A, 87-89%= B+, 80-87%= B, 77-79%= C+, 70-75%= C, 66-69%= D+, 60-65%= D, <60%= F. Grade is based on mastery, not on a curve. Please note that plagiarism will not be tolerated—always provide your sources!

OTHER INFORMATION:
It is important that students have the tools to succeed in this course. Please see the instructor *as soon as possible* with any difficulties or questions regarding the course materials. In addition student affairs (http://studentaffairs.rutgers.edu/) for any needs or concerns.
<table>
<thead>
<tr>
<th>Date</th>
<th>Assignment due</th>
<th>Purpose of the day</th>
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<tbody>
<tr>
<td>9-5</td>
<td>None</td>
<td>Introductions, establish goals for environmental education and discuss strategies for changing learner behavior.</td>
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<tr>
<td>9-12</td>
<td>Assignment 1</td>
<td>Discuss best practices in teaching, and consider the parallels between the content we teach our students and the practice that we as teachers engage in.</td>
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<tr>
<td>9-19</td>
<td>Assignment 2</td>
<td>We will go outside. We will discuss using the outdoors as a classroom. We will discuss the parallels between authentic inquiry experiences and foundational awareness in EE.</td>
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<tr>
<td>9-26</td>
<td>Field trip: Helyar</td>
<td>To address a major issue in EE—promoting concern for the environment. Engage in activities supported by NJ Audubon and Jane Goodall Institute (excellent resources!). You'll also have the opportunity to play with teaching equipment.</td>
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<tr>
<td>10-3</td>
<td>Quiz 1</td>
<td>Given that we've considered motivation, and inquiry skills, we will now consider issue investigation and resolution skills. We will discuss rubrics as we consider the best practices for the development of EE learning units.</td>
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<tr>
<td>10-10</td>
<td>Written Assignment Due—be prepared to share</td>
<td>We will also consider evidence of meeting ones goals; or classroom assessment. We will focus again on rubrics and plan mini teacher exercises.</td>
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<tr>
<td>10-17</td>
<td>Microteaching</td>
<td>This is your chance to tie together what we’ve learned about EE and science instruction. It should be fun!</td>
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<tr>
<td>10-24</td>
<td>Journal 1</td>
<td>During the next 3 weeks, we will hear from various EE professionals from around the state. We will take this time to consider the best practices in EE and whether these programs will help us to meet needs.</td>
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<td>10-31</td>
<td>Assignment 3</td>
<td>Same as above</td>
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<tr>
<td>11-7</td>
<td>Assignment 4</td>
<td>Same as above</td>
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<tr>
<td>11-14</td>
<td>Journal 2; Assignment 5</td>
<td>Hopefully you’ll see how science instruction is conducive to EE. You’ll have the opportunity to play with teaching equipment.</td>
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<tr>
<td>11-28</td>
<td>EE unit presentations Quiz 2</td>
<td>This is a chance for you to practice implementing EE into your classroom. This is another opportunity to tie together what we’ve learned about EE and science instruction, you will work with a group.</td>
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<td>12-5</td>
<td>Assignment 6</td>
<td>Here we will consider the final component of EE; taking action. We will address large issues and grapple with the fact that we are only good as Env. Educators if we know about the issues that face our environment.</td>
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<tr>
<td>12-12</td>
<td>Final Exam due (maybe!!)</td>
<td>We will have the opportunity to discuss teaching with a classroom teacher and environmental educator. We will also consider professional development needs.</td>
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<tr>
<td>Final Exam</td>
<td>This will be your opportunity to tie everything we’ve done for the course. This will be a take home.</td>
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We will be engaged in a number of activities throughout the semester. It is often easy to loose the major points through all the details.

The important themes in the course are:

A. Master instructors often employ a systematic method to collecting data about their teaching and using this information to modify their practice (action research).

B. The environment is a motivating context by which important scientific ideas can be taught.

C. The major goals of environmental education (resulting in an ability to take action toward environmental sustainability) are:

1.) Motivating a desire to become active in environmental sustainability.
2.) Promoting foundational knowledge about the science (social, biological, physical, etc.) behind understanding environmental issues.
3.) Promoting issue awareness skills.
4.) Providing an ability to act toward environmental sustainability.

Research suggests that providing outdoor experiences and instruction that explicitly encourages issue resolution and action is likely to be most successful in meeting the goals stated above

Note: You should be familiar with the policy and research that has shaped the components of part C.

D. There are numerous resources available to help you incorporate EE (environmental education) into your instruction.

Throughout this course, I will encourage you to gain practice in employing sound science teaching techniques and I will encourage you to think critically often asking yourself:

What is my point?
How do I know what I know?

Disclaimer:

This course is NOT a comprehensive review of environmental issues, nor is a comprehensive review of science teaching strategies.
This course is intended to encourage you to think critically about teaching as a practice through the lens of environmental education. I STRONGLY encourage you to keep a notebook or box where you can store your materials until you begin classroom teaching.