

*SUNY Potsdam*  
*Student Learning Outcomes Assessment Plan - Environmental Studies*

**Department Name:** Environmental Studies

**Date Submitted and Academic Year:** Fall 2009

**Department Mission Statement:** see attached

**Department Assessment Coordinator Completing this Form:** J. Omohundro

**Update on prior years' "Application of Assessment Results:**

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**Intended Student Learning Outcome #1**

Students will be able to:

Re-create the curriculum map of "inputs" by the c. 20 participating courses, of a set of 4 knowledge outcomes, 6 capabilities outcomes, and 5 experience outcomes, revised April 2009 (See attached). Faculty designate which of these outcomes their courses require student performance (Y) and if there is a graded assignment in the course for which the outcome is a primary criterion (YY).

**Connection to Univ/Dept Mission**

Some outcomes on the map are those specified in the major application to Department of Education. The other outcomes are discipline-specific and conform to department standards.

**Links with other programs/departments**

- *Gen Ed Component*
  
- *Related Courses*

**Measurable Criteria and Assessment Method(s)**

The transcript of each graduated major student in 2010 will be analyzed for which ES courses, and thus which ES outcomes, he/she experienced, and how often.

These data will be matched to the results of a specified list of graded assignments in those courses and capstone courses (see outcomes listed below).

**Data Source/Results & Analysis**

Map data for May graduates will be compiled each September into a histogram offering a synoptic profile of which desired outcomes our majors are being exposed to, and how often, as illustrated in 2008 report.

**Application of Results/Action Plan for Improvement** Not until Sept 2010

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**Intended Student Learning Outcome #2**

Students will be able to demonstrate:

Knowledge of a **history of conservation**

**Connection to Univ/Dept Mission**

Contributes to a sense of place in time as well as space

**Links with other programs/departments**

- *Gen Ed Component*
- *Related Courses:* are researching this

**Measurable Criteria and Assessment Method(s)**

Grades of each ES major student in one graduating cohort in one or more exercises, in specified courses, which take that outcome as a central criterion for evaluation.

**Data Source/Results & Analysis**

Results will be compiled into a spreadsheet for that graduating cohort. Columns in spreadsheet: individual STUDENT, and combined COHORT.

| <u>Outcome #-</u> | <u>Course-</u> | <u>Assignment-</u> | <u>Grade-</u> | <u>Frequency of "exposure"</u><br><u>( i.e. relevant courses taken)</u> |
|-------------------|----------------|--------------------|---------------|-------------------------------------------------------------------------|
|-------------------|----------------|--------------------|---------------|-------------------------------------------------------------------------|

**Application of Results/Action Plan for Improvement** - to be reported September 2010

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**Intended Student Learning Outcome #3**

Students will be able to:

Analyze environmental information, including using quantitative methods [Capability item #2]

--for 2010, specifically: can apply ecological concepts to describe an ecosystem

**Connection to Univ/Dept Mission**

fluency in the scientific vocabulary of environmental research

**Links with other programs/departments**

- *Gen Ed Component* -similar to science-biological mode courses
- *Related Courses:* being researched.

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**Measurable Criteria and Assessment Method(s)**

See outcome 2 for method

**Data Source/Results & Analysis**

See outcome 2 for data anticipated and analytic method

**Application of Results/Action Plan for Improvement** to be reported September 2010

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**Intended Student Learning Outcome #4**

Students will be able to:

**Describe how to take environmental action as a citizen [Capability item #4]**

**Connection to Univ/Dept Mission**

Major is action- and service- oriented

**Links with other programs/departments**

- *Gen Ed Component* – meets general goal of Gen Ed for active knowledgeable citizens
  
- *Related Courses* under survey now

**Measurable Criteria and Assessment Method(s)**

See outcome 2 for method

**Data Source/Results & Analysis**

See outcome 2 for data and analysis

**Application of Results/Action Plan for Improvement** to be reported September 2010

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**Intended Student Learning Outcome #5**

Students will be able to:

**Interpret the environmental views of others through their arts, discourse, and writing. [Capability item #6]**

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**Connection to Univ/Dept Mission**

Humanistic as well as scientifically grounded ability to interpret environmental information

**Links with other programs/departments**

- *Gen Ed Component* – close connection to Aesthetic Critical mode of inquiry
- *Related Courses* under research

**Measurable Criteria and Assessment Method(s)**

See outcome 2 for method

**Data Source/Results & Analysis**

See outcome 2 for data and analysis

**Application of Results/Action Plan for Improvement** to be reported September 2010

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**Intended Student Learning Outcome #6**

Students will be able to demonstrate ability to:

**Exercise environmental citizenship, possibly including leadership.**

[Experience item #3]

**Connection to Univ/Dept Mission**

Engaged citizenry; College supports service-learning as citizenship and application of scholarship

**Links with other programs/departments**

- *Gen Ed Component* –
- *Related Courses* under research now

**Measurable Criteria and Assessment Method(s)**

See outcome 2 for method

**Data Source/Results & Analysis**

See outcome 2 for data and analysis

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*Application of Results/Action Plan for Improvement* to be reported September 2010

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|                                                                                            |
|--------------------------------------------------------------------------------------------|
| <i>Summary of Action Plans for 2009-2010</i>                                               |
| 1. Nov: complete curriculum map                                                            |
| 2. Nov and April: Enlist instructors to collect data on learning outcomes in their courses |
| 3. May: collect outcome data and compile                                                   |
| 4. May: faculty review of data and consensus on response                                   |
| 5.                                                                                         |
| 6.                                                                                         |
| 7.                                                                                         |
| 8.                                                                                         |

**Our mission is to graduate environmentally-informed and capable citizens, meaning they possess:**

| <b>KNOWLEDGE area</b>                                      | <b>EXAMPLES of measures stated in terms of student performance</b>                                                                                                                                                                                                                                                                                                   | <b>My course has at least one graded task for students featuring this outcome (mark "Y" or leave blank)</b> |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>1. history of conservation</b>                          | Chronicle efforts to raise awareness and protect the environment in the Western world, or the U.S., since 1800.                                                                                                                                                                                                                                                      |                                                                                                             |
| <b>2. history and forms of human-environment relations</b> | <p>Explain with historical examples how the North American environment shapes human expectations, possibilities and behaviors, and how Americans have understood their natural environment and their appropriate role in it.</p> <p>Illustrate with examples how political, economic, and cultural history combine with natural history to shape the environment</p> |                                                                                                             |

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|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                    | <p>Discuss how language shapes our perceptions and definitions of nature</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| <p><b>3. Current environmental issues</b></p>                                      | <p>Explain how geographic information systems GIS have been or may be used in environmental planning<br/> describe how environmental policy is formed and implemented<br/> Describe the values attributed to wildland and the challenges to its preservation</p>                                                                                                                                                                                                                                                                                                                                        |  |
| <p><b>4. The Adirondacks, as a particular place (4 items)</b></p>                  | <p>Identify ways in which the Adirondacks mirrors or anticipates national and global environmental issues<br/> Explain some of the key laws, policies, and bureaucracy involved in environmental planning and management, particularly in NY and the Adirondacks (e.g. SEQRA, UMPs, APA Act, Article XIV)<br/> Compare the Adirondack historical experience to that of another protected landscape.<br/> Describe the physical and biological aspects of the Adirondacks<br/> Compare and contrast the physical and biological aspects of the Adirondacks with those of parks elsewhere in the U.S.</p> |  |
| <p><b>Capabilities or skills to permit active engagement with environment:</b></p> | <p>EXAMPLES of testable tasks (others are possible)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |

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|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p><b>5. Collect or locate, and evaluate the quality of environmental information</b></p> | <p>Search for primary literature in the environmental sciences<br/>evaluate the mass media for coverage of environmental topics<br/>locate and evaluate published information to explore the causes and consequences of an environmental problem</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
| <p><b>6. Analyze environmental information, including using quantitative methods</b></p>  | <p>analyze and create a philosophical or political argument about managing nature<br/>design and execute a study of human behavior in or attitudes toward nature<br/>construct and interpret graphs and statistics<br/>bring scientific data and perspective to bear on an analysis of human behavior and values<br/>Identify the physical and biological aspects of a biotic community<br/>apply ecological concepts (such as biogeochemical cycling, energy flow, biotic community structure, and population dynamics) to describe an ecosystem<br/>interpret the scientific evidence for an environmental problem (such as stratospheric ozone depletion, global warming, acid rain, air and water</p> |  |

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|                                                                               | <p>pollution, and waste production –solid and hazardous)</p> <p>Evaluate the rhetorical, empirical, justice, and ethical, etc. aspects of arguments in an environmental controversy</p> <p>Collect and analyze biological data from an ecosystem</p> <p>Conduct an environmental monitoring exercise</p> <p>Analyze and evaluate the policy options for mitigation and adaptation of some environmental problem.</p> |  |
| <p><b>7. Take an interdisciplinary approach to an environmental topic</b></p> | <p>plan ecologically sound practices integrating considerations from multiple disciplines</p> <p>Combine more than one disciplinary perspective to describe an environmental topic</p>                                                                                                                                                                                                                               |  |
| <p><b>8. Take environmental action as a citizen</b></p>                       | <p>Identify ways one can be an active environmental citizen</p> <p>Describe a couple of graduate school environmental studies programs suitable for oneself</p> <p>describe some post-BA tracks for students with environmental studies degrees, including type of</p>                                                                                                                                               |  |

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|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                          | <p>work and types of employers, and internship opportunities</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <p><b>9. Communicate one's views and knowledge on environmental topics to others</b></p>                 | <p>Compose technical documents such as manuals, proposals, news releases, or reports with environmental themes</p> <p>debate or deliver a persuasive talk on environmental issues</p> <p>use effective communication strategies to educate the public about environmental issues</p> <p>Articulate a personal relationship to the natural world in aesthetic, cultural, or philosophical terms</p> <p>Develop a resumé for post-graduate employment</p> <p>Practice writing in an ecological or systemic mode utilizing a variety of disciplines</p> <p>Keep a journal of description, critical reflection, and personal expression on nature</p> |  |
| <p><b>10. Interpret the environmental views of others through their arts, discourse, and writing</b></p> | <p>Explain how in their work poets, writers and other artists respond to nature and influence later artists' responses.</p> <p>Use a critical vocabulary enabling precise discussion of a work of visual art or writing.</p>                                                                                                                                                                                                                                                                                                                                                                                                                      |  |

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| EXPERIENCE                                                                             | EXAMPLES                                                                                                                                                                                                                                                            |  |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>11. Service learning for govt or nonprofit group</b>                                | <p>participated in a service-learning project on an environmental topic</p>                                                                                                                                                                                         |  |
| <b>12. Participation in a Group/team project</b>                                       | <p>Participated in a team to produce a product or perform work on an environmental issue</p>                                                                                                                                                                        |  |
| <b>13. Exercise environmental citizenship, possibly including leadership</b>           | <p>Demonstrate effective leadership in a group performing an environmental task</p> <p>taken an active role in an extracurricular organization embracing environmental citizenship</p> <p>Met with scientists and agency officials charged with managing nature</p> |  |
| <b>14. Complete a project of independent scholarship</b>                               | <p>On one's own, designed and reported on original research into an environmental topic</p>                                                                                                                                                                         |  |
| <b>15. attendance in the field, as defined by one of the environmental disciplines</b> | <p>observed first hand a variety of biotic communities, identifying plants and animals in situ</p> <p>Shadowed an environmental professional</p> <p>Prepared for and participated in leave-no-trace camping</p>                                                     |  |