

# Program Assessment Plan

## American University

### Academic Program: CAS: Environmental Studies - BA

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Contact Person for Albert Cheh

Assessment:

Unit Website Address: <http://www.american.edu/cas/environmental/index.cfm>

Unit's Primary Department: Environmental Science

COLA Reader -1: Teresa Larkin

COLA Reader -2: Lynne Arneson

#### Learning Outcome: Development of Environmental Literacy

Students will progress through the stages of 1) environmental awareness, 2) understanding the environmental impact of personal conduct, and 3) true environmental literacy (see <http://www.neefusa.org/pdf/ELR2005.pdf>)

Outcome Year: 2012-2013

Start Date: 09/01/2012

End Date: 04/29/2013

Outcome Status: Active Learning Outcome

Assessment Plan			
Assessment Measure	Target	Schedule/Cycle	Active
We plan to use the questionnaires/tests from Roper <a href="http://www.neefusa.org/pdf/ELR2005.pdf">http://www.neefusa.org/pdf/ELR2005.pdf</a> and other organizations such as the Michigan State University Environmental Literacy Project <a href="http://edr1.educ.msu.edu/environmentallit/index.htm">http://edr1.educ.msu.edu/environmentallit/index.htm</a> to ascertain the level of environmental literacy among beginning students (in ENVS-150), intermediate students (in ENVS-250 and graduating students (at the end of the senior capstone <b>Measure Type:</b> Quiz/ Exam	Our target is to show successive improvement in the scores of students as they progress through the major. Roper gives benchmarks for the average degree of knowledge exhibited by the American public (about 33% can pass a basic test about basic environmental knowledge (>7 out of 12 questions answered correctly; only 12% are able to pass a basic quiz about energy; ). We expect beginning students in ENVS-150 to do only a little better. By the time majors reach their senior year we would expect nearly everyone to pass the basic quiz of environmental knowledge and 80% or more to pass the more difficult quiz on energy.	The test will be performed once a year when ENVS-150, ENVS-300 and ENVS-492 are offered at the same time. The instructors for the courses will evaluate and summarize the scores and those summaries will be reported to the chair who will report summaries at the next faculty meeting.	Yes

#### Related Courses

- ENVS-250 - Living in the Environment
- ENVS-492 - Senior Capstone in Environmental Studies

#### Learning Outcome: Quantitative Skills

Develop and apply quantitative skills in evaluating environmental problems.

Outcome Year: 2012-2013

Start Date: 09/01/2012

End Date: 04/29/2013

Outcome Status: Active Learning Outcome

Assessment Plan			
Assessment Measure	Target	Schedule/Cycle	Active

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Assessment Measure	Target	Schedule/Cycle	Active
Laboratory reports - students in ENVS 150 should demonstrate the ability to calculate results from data obtained in laboratory experiments. When an advanced lab (ENVS-396, Environmental Methods) is created, upper level majors should demonstrate the ability to handle data and do calculations properly from more complex and sophisticated experiments. <b>Measure Type:</b> Written Assignment	A numeric target will be developed using a grading rubric after this assessment cycle.	ENVS 150 is offered every semester. ENVS 396 will be offered for the first time in Spring 2013.	Yes

### Related Courses

- ENVS-250 - Living in the Environment
- ENVS-492 - Senior Capstone in Environmental Studies

### Learning Outcome: Gather, Assess and Translate Scientific Information

Be able to gather and assess the quality of scientific information and translate it into a form usable by the general public.

**Outcome Year:** 2012-2013

**Start Date:** 09/01/2012

**End Date:** 04/29/2013

**Outcome Status:** Active Learning Outcome

Assessment Plan			
Assessment Measure	Target	Schedule/Cycle	Active
Position Papers: In this assignment, the student must provide a well-supported position on an environmental issue. <b>Measure Type:</b> Written Assignment	A numeric target will be developed using a grading rubric after this assessment cycle. As students progress through the curriculum they will be expected to use larger numbers of sources that require greater degrees of technical understanding (e.g. from textbooks/encyclopedias to primary scientific literature)	A subset of the papers will be randomly selected from ENVS-150, ENVS-250 and ENVS-492, and then independently evaluated by at least 2 different faculty using a standard rubric. This will be done every three years by the undergraduate committee and reported to the chair, and then discussed at the subsequent faculty meeting.	Yes
Internship and Independent Study Evaluations: All students are required to do an internship or an Independent Study. Grade for this includes an evaluation from the internship/study advisor using a standard form with questions on a numerical grading scale. <b>Measure Type:</b> Field Work/ Internship	A numerical target will be developed after this assessment cycle. Internships often require assembling and reporting on scientific information. The goal is to have our majors perform such tasks successfully as evaluated by the advisor/supervisor.	Numerical scores from all of the evaluation forms will be analyzed at the end of each academic year by the departmental internship advisor. The advisor will report to the chair on the same schedule. The report will be summarized and presented to the faculty at a faculty meeting.	Yes

### Related Courses

- ENVS-250 - Living in the Environment
- ENVS-492 - Senior Capstone in Environmental Studies

### Learning Outcome: Policy Making

Describe how science can inform policy-making.

**Outcome Year:** 2012-2013

**Start Date:** 09/01/2012

**End Date:** 04/29/2013

**Outcome Status:** Active Learning Outcome

### Assessment Plan

Assessment Measure	Target	Schedule/Cycle	Active
Position Papers: In this assignment, the student must provide a well-supported position on an environmental issue. <b>Measure Type:</b> Written Assignment	Students should provide arguments for both sides of an environmental issue and make a persuasive argument for their own position on the issue. The underlying science the student uses to support their position should not show any inaccuracies. Students in the capstone course (ENVS-492) should show greater sophistication in their arguments.	Papers will be selected from ENVS-150 and ENVS-492 (Fall 2012) for evaluation by faculty in charge of assessment for ENVS.	Yes

### Related Courses

- ENVS-250 - Living in the Environment
- ENVS-492 - Senior Capstone in Environmental Studies