

Program Assessment Plan  
 American University  
 Academic Program: CAS: Environmental Science - MS

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**Unit's Primary Department:** Environmental Science

**Learning Outcome: Scientific Knowledge**

Define the major scientific underpinnings of emerging environmental issues.

**Outcome Year:** 2009-2010  
 2010-2011  
 2011-2012

**Start Date:** 04/06/2009

**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. Position papers will be assigned across the core curriculum and compiled for analyses. <b>Measure Type:</b> Written Assignment	A numerical target will be developed using a grading rubric after this assessment cycle.	A subset of the papers will be randomly selected from cross-section of courses, and then independently evaluated by at least 2 different faculty using a standard rubric. This will be done every three years by the graduate committee and reported at a faculty meeting.	Yes
Comprehensive Exam: All students must pass a written comprehensive exam after their first and before their last semester. The exams are graded pass/fail by at least two ENVS faculty members. <b>Measure Type:</b> Quiz/ Exam	Data on rates of overall passing/failure and by topic area will be used to assess appropriateness of course work, etc.	The exam is administered twice annually and the exam is evaluated by at least two faculty. Each question will be graded according to the following scale: fail, pass, pass with distinction. The graduate chair will compile exams and evaluations which will be reviewed by the graduate committee biennially. The graduate chair will present the finding during a faculty meeting.	Yes
Significant Research Paper: Students are required to submit an SRP in their final semester. These SRPs are evaluated by at least 2 of the ENVS faculty. <b>Measure Type:</b> Final Paper/ Final Project	A numerical target (e.g. proportion passing with distinction) will be developed using a grading rubric after this assessment cycle.	All of the papers will be evaluated using a standard rubric to be developed based on the learning outcomes and assigned one of the following grade: fail, pass, pass with distinction. This will be done annually by at least two ENVS faculty. There will be a general discussion at the end of the academic year to assess the performance of the students.	Yes

**Learning Outcome: Quantitative Skills**

Develop and apply quantitative skills in evaluating environmental problems.

**Outcome Year:** 2009-2010  
 2010-2011  
 2011-2012

**Start Date:** 04/06/2009  
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Assessment Measure	Target	Schedule/Cycle	Active
<p>Position Papers: In this assignment, the student must provide a well-supported position on an environmental issue. Position papers will be assigned across the core curriculum and compiled for analyses.</p> <p><b>Measure Type:</b> Written Assignment</p>	<p>A numerical target will be developed using a grading rubric after this assessment cycle.</p>	<p>A subset of the papers will be randomly selected from cross-section of courses, and then independently evaluated by at least 2 different faculty using a standard rubric. This will be done every three years by the graduate committee and reported at a faculty meeting.</p>	Yes
<p>Internship and Independent Study Evaluations: All students are required to do an internship. Grade for this includes an evaluation from the internship advisor using a standard form with questions on a numerical grading scale.</p> <p><b>Measure Type:</b> Field Work/ Internship</p>	<p>A numerical target will be developed after this assessment cycle.</p>	<p>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 findings during a faculty meeting.</p>	Yes
<p>Comprehensive Exam: All students must pass a written comprehensive exam after their first and before their last semester. The exams are graded pass/fail by at least two ENVS faculty members.</p> <p><b>Measure Type:</b> Quiz/ Exam</p>	<p>Data on rates of overall passing/failure and by topic area will be used to assess appropriateness of course work, etc.</p>	<p>The exam is administered twice annually and the exam is evaluated by at least two faculty. Each question will be graded according to the following scale: fail, pass, pass with distinction. The graduate chair will compile exams and evaluations which will be reviewed by the graduate committee biennially. The graduate chair will present the finding during a faculty meeting.</p>	Yes
<p>Significant Research Paper: Students are required to submit an SRP in their final semester. These SRPs are evaluated by at least 2 of the ENVS faculty.</p> <p><b>Measure Type:</b> Final Paper/ Final Project</p>	<p>A numerical target (e.g. proportion passing with distinction) will be developed using a grading rubric after this assessment cycle.</p>	<p>All of the papers will be evaluated using a standard rubric to be developed based on the learning outcomes and assigned one of the following grade: fail, pass, pass with distinction. This will be done annually by at least two ENVS faculty. There will be a general discussion at the end of the academic year to assess the performance of the students.</p>	Yes

**Learning Outcome: Translate Scientific Information**

Be able to translate scientific information into a form usable by the general public.

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2010-2011  
2011-2012

**Start Date:** 04/06/2009  
**Outcome Status:** Active Learning Outcome

Assessment Plan			
Assessment Measure	Target	Schedule/Cycle	Active

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### Learning Outcome: Policy Making

Describe how science can inform policy-making.

**Outcome Year:** 2009-2010

2010-2011

2011-2012

**Start Date:** 04/06/2009

**Outcome Status:** Active Learning Outcome

Assessment Plan			
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<p>Internship and Independent Study Evaluations: All students are required to do an internship. Grade for this includes an evaluation from the internship advisor using a standard form with questions on a numerical grading scale.</p> <p><b>Measure Type:</b> Field Work/ Internship</p>	<p>A numerical target will be developed after this assessment cycle.</p>	<p>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 findings during a faculty meeting.</p>	Yes
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**Assessment Plan**

<b>Assessment Measure</b>	<b>Target</b>	<b>Schedule/Cycle</b>	<b>Active</b>
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