

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

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Contact Person for Cheh Albert

Assessment:

Unit's Primary Department: Environmental Science

COLA Reader -1: Teresa Larkin

COLA Reader -2: Lynne Arneson

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. Measure Type: 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. Measure Type: 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. Measure Type: 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

Outcome Status: Active Learning Outcome

| Assessment Plan | | | |
|---|--|--|--------|
| 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>Measure Type: 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>Measure Type: 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>Measure Type: 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>Measure Type: 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.

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

Start Date: 04/06/2009

Outcome Status: Active Learning Outcome

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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>Measure Type: 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>Measure Type: 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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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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| Assessment Measure | Target | Schedule/Cycle | Active |
| <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>Measure Type: 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

| Assessment Measure | Target | Schedule/Cycle | Active |
|---------------------------|---------------|--|---------------|
| | | the academic year to assess the performance of the students. | |