AMERICAN UNIVERSITY
WASHINGTON, D C

Environmental Science (M.S.)

Department Website: http://www.american.edu/cas/environmental/

M.S. in Environmental Science is a rigorous, interdisciplinary program of study designed to provide the student with a basic understanding of the scientific and social processes that shape our environment. Students completing the program will have the fundamental knowledge and critical thinking skills to make independent, rational decisions concerning current and pressing environmental issues. Graduates of the program will be prepared for employment in natural resource fields dealing with basic and applied scientific interests, environmental management and policy-making, or for additional graduate level training in environmental science and in professional programs in law, engineering, or business.

1. Learning Outcomes

a. Define the major scientific underpinnings of emerging environmental issues.

b. Develop and apply quantitative skills in evaluating environmental problems

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

d. Describe how science can inform policy-making.

2. Assessment Plan

Measures	Target	Learning Outcomes	**Cycle and Reviewers**
Measure 1: 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.	A numerical target will be developed using a grading rubric after this assessment cycle.	a, b, c	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.
Measure 2: Internship & 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.	A numerical target will be developed after this assessment cycle.	b, c, d	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.

Measure 3: Comprehensive Exam: All students must pass a written comprehensive exam after their first and before their last semester. The exams are graded as pass/fail by at least two ENVS faculty members.	Data on rates of overall passing/failure an by topic area will used too assess appropriateness of course work, etc.	a, b	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.
Measure 4: 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.	A numerical target (e.g., proportion passing with distinction) will be developed using a grading rubric after this assessment cycle.	a, b, c, d	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.