Environmental Management MS PROGRAM ASSESSMENT

I. Program Goal(s)

Students who complete the M.S. in Environmental Management will thoroughly understand:

- 1. the interdisciplinary approach to the study of the relationships and interactions of human beings with the natural world,
- 2. the prevention and mitigation of environmental problems, from both a theoretical and applied perspective, and
- 3. how to effectively communicate environmental management issues in both written and oral formats.

II. Learning Outcomes(s)

- 1a. Evaluate human impacts on the environment, using principles and processes of the natural sciences, social sciences and the humanities
- 1b. Identify and use appropriate tools, techniques, and technologies for the protection and management of the environment
- 2a. Describe and critique regulatory, policy, and planning issues for the protection and management of the environment
- 2b. Determine technical and policy opportunities for offsetting and reducing environmental impacts
- 3a. Develop a written synthesis of environmental problems and potential management approaches to these problems
- 3b. Present an in-depth analysis of environmental problems and potential management approaches to an audience of peers

Measures

1a. Evaluate human impacts on the environment, using principles and processes of the natural sciences, social sciences and the humanities

Embedded test questions in ENVM 601, 611, 614 Evaluation of a subset of written Master's Projects.

1b. Identify and use appropriate tools, techniques, and technologies for the protection and management of the environment

Embedded test questions in ENVM 654, 655, 656

Evaluation of a subset of written Master's Projects.

2a. Describe and critique regulatory, policy, and planning issues for the protection and management of the environment

Embedded test questions in ENVM 613, 680 (Environmental Policy & Design) Evaluation of a subset of written Master's Projects.

2b. Determine technical and policy opportunities for offsetting and reducing environmental impacts

Embedded test questions in ENVM 621, 656, 680 (Climate Change Mitigation) Evaluation of a subset of written Master's Projects.

3a. Develop a written synthesis of environmental problems and potential management approaches to these problems

Evaluation of a subset of written Master's Projects.

3b. Present a comprehensive overview of environmental problems and potential management approaches to an audience of peers

Evaluation of presentations in ENVM 620 Faculty evaluation of oral presentations for Master's Projects

IV. Time Frame

2008/2009: We will evaluate Learning Outcomes 3a & 3b 2009/2010: We will evaluate Learning Outcomes 1a & 1b 2010/2011: We will evaluate Learning Outcomes 2a & 2b

V. Who Will Do the Assessment?

A subcommittee within the Environmental Science Department will take primary responsibility for assessment of the Environment Management graduate program. This will include the Graduate Program Directors and at least two other faculty members. They will conduct the review of Learning Outcome #3 in Spring 2009 and report back to the Department in Fall 2009. The full Department will review subcommittee's assessment; pending Departmental review of this first Learning Outcome, we may expand the subcommittee to include additional faculty (although the Department only has seven full-time faculty members).

VI. How data will be used to improve program or revise curricula

Pending the results from review described above, the subcommittee will make recommendations to the Department regarding strengths and weaknesses in the MSEM curriculum. On an annual basis, the Department will reassess the effectiveness of the program, and of individual classes, in preparing students to meet the MSEM Learning Objectives.