

**Master of Arts in Environmental Studies
2006-2007 Assessment Report**

Submitted by Sanda Kaufman,
Program Director, MA in Environmental Studies
June 1, 2007



The Master of Arts in Environmental Studies program prepares students for careers in environmental policy and management while providing students with a broad, interdisciplinary course of study. Developing human institutions, organizations and behaviors that restore and protect the environment requires careful study of both natural and human systems and their interdependence. This task is at the core of an environmental studies degree program.

Our mission is “to educate students with a core foundation in environmental science and environmental policy for professional careers that will “bridge the gap” between environmental scientists and public policy professionals in order to protect the integrity, diversity, and resilience of existing ecological systems and to create sustainable human settlements.”

Curricular Goals

1. Students will have a core knowledge base in biology, geology, chemistry, environmental engineering, and environmental physics
2. Students will understand the institutional and organizational context in which environmental policies and decisions are made and implemented through law, regulation, and administrative and financial practices
3. Students will understand the processes of public policy decisions, including the relationship between scientific research and environmental policy and inter-organizational relationships
4. Students will be able to design a policy-based applied research project, collect and analyze data, and determine results using a variety of methods and techniques relevant for environmental policy
5. Students will be able to specialize in an area related to public decision making

The MA in Environmental Studies program is part of a three-program interdisciplinary project at CSU, entailing collaboration on the part of faculty from the three degree-granting colleges: Urban Affairs, Engineering, and Science to achieve our goal of an integrated, multi-disciplinary experience. Core courses in each program are shared, to allow students from the three masters programs in environmental studies, science, and engineering to interact and learn in a cross-disciplinary setting.

The MA program recently underwent a change in program directors. This presents an opportunity for Environmental Studies faculty to re-evaluate the suitability and effectiveness of our assessment instruments. Changes will be implemented in throughout the course of the 2007-2008 year.



Program: Master of Arts in Environmental Studies	Completed By: Sanda Kaufman and Rachel Singer
Department: Urban Studies	Date: June 1, 2007

Goal 1: Students will demonstrate proficient understanding of the relationship between core scientific concepts, scientific research, and technology and its use in environmental policy development and implementation as evidenced by their ability as evidenced by their ability to describe and apply these concepts to specific environmental policy issue in a paper and a presentation.

Outcomes	Research Methods	Findings	Review	Actions
Relationship between science, technology and policy, as demonstrated in a policy and administration writing assignment.	Rubric is used by faculty to assess student performance in ENV 652: Environmental Policy and Administration.	4 M.A. students completed ENV 652 in Fall 2006. Performance: Excellent:: 75% Good: 25%	Data are reviewed by the MAES Program Director and Department Chair. Results are reported to the MAES faculty and significant findings are discussed at the Fall faculty meeting; appropriate actions are agreed upon.	Results are satisfactory. No action necessary at this time.
Relationship between science, technology and policy as demonstrated in a required presentation.	Rubric to assess student performance in ENV 595: Environmental Seminar final project presentation is used by two or more faculty members, including the director of the MA program. Rubric 1B/2B/3B - Category 2: Ecological Systems and Technology	Course was not taught in Spring 2007 – data not available.	Data are reviewed by the MAES Program Director and Department Chair. Results are reported to the MAES faculty and significant findings are discussed at the Fall faculty meeting; appropriate actions are agreed upon.	MAES faculty will review data at the Spring 2007 faculty meeting. No actions at this time.



Goal 2: Students will demonstrate proficient understanding of public environmental policy-making, as evidenced by their ability to describe the institutional and organizational context in which environmental policies and decisions are made and the legal, regulatory and administrative practices by which they are implemented.				
Outcomes	Research Methods	Findings	Review	Actions
Environmental policymaking assessed through the required research project (thesis or exit project).	Rubric to assess student performance is implemented as each student completes his or her exit project.	5 students completed exit projects in 2006-2007. Mean score = 3.1 4: Excellent, 3: Good, 2: Fair	Results of data are reviewed by the MAES Program Director, Department Chair. Results are reported to the MAES faculty and significant findings are discussed at the fall faculty meeting, appropriate actions are agreed upon.	Results are satisfactory. No action at this time.
Environmental policymaking process and context as demonstrated in a required presentation.	Rubric to assess student performance in ENV 595 final project presentation is used by two or more faculty members, including the director of the MA program. Rubric 1B/2B/3B – Category 1: Environmental Policy and Regulations and Category 3: Social and Political Factors	Course was not taught in Spring 2007 – data not available.	Results of data are reviewed by the MAES Program Director, Department Chair. Results are reported to the MAES faculty and significant findings are discussed at the fall faculty meeting, appropriate actions are agreed upon.	Data will be reviewed in Spring 2008.
Students assess improvement in their knowledge in a set of substantive areas.	Students assess knowledge through self-assessment. This rubric has been used for several years. Section 1: Knowledge on Rubric 2C/3C.	2 students submitted responses to the survey. Mean knowledge level upon entering MAES program = 3.22 Mean knowledge level upon graduating = 4.22 Scale: 1 = none, 5 = high	Results of data are reviewed by the MAES Program Director, Department Chair. Results are reported to the MAES faculty and significant findings are discussed at the fall faculty meeting, appropriate actions are agreed upon.	Students showed substantial improvement in perceived knowledge level between entrance and graduation. No action necessary at this time.



Goal 3: Students will demonstrate proficiency in research and analysis, as evidenced by their ability to the design and implement a major research project (the required exit project), use techniques of quantitative reasoning, and communicate using oral, visual and written methods.

Outcomes	Research Methods	Findings	Review	Actions
Design of the research project for its organization and written proficiency.	Student performance assessed using Rubric 2A/3A, Section 2 Skills, administered by faculty supervisor when the exit project is evaluated.	5 students completed exit projects in 2006-2007. Mean score: 3.0 4: Excellent, 3: Good, 2: Fair	Results of data are reviewed by the MAES Program Director, Department Chair. Results are reported to the MAES faculty and significant findings are discussed at the fall faculty meeting, appropriate actions are agreed upon.	Results are satisfactory. No action at this time.
Presentation organization, substantive materials, appropriate use of analytical methods, and oral and visual presentation skills are assessed.	Rubric to assess student performance in ENV 595 final project presentation is used by two or more faculty members, including the director of the MA program. Rubric 1B/2B/3B, Category 4: Conveyance of Ideas.	Course was not taught in Spring 2007 – data not available.	Results of data are reviewed by the MAES Program Director, Department Chair. Results are reported to the MAES faculty and significant findings are discussed at the fall faculty meeting, appropriate actions are agreed upon.	Data will be reviewed in Spring 2008.
Self-assessment of knowledge of research and analysis techniques.	Students assess knowledge through self-assessment. This rubric has been used for several years: Section 2: Skills on Rubric 2C/3C.	2 students submitted responses to the survey. Mean skills level upon entering MAES program = 3.64 Mean skills level upon graduating = 4.07 Scale: 1 = none, 5 = high	Results of data are reviewed by the MAES Program Director, Department Chair. Results are reported to the MAES faculty and significant findings are discussed at the fall faculty meeting, appropriate actions are agreed upon.	Students showed substantial improvement in perceived skill level between entrance and graduation. No action necessary at this time.



Goal 3: Continued				
Outcomes	Research Methods	Findings	Review	Actions
Identify types of problems and questions that lend themselves to quantitative analysis, formulate hypotheses and identify the means to test them quantitatively, and explain the meaning of results.	PDD 601: Applied Quantitative Reasoning I exams (offered multiple semesters) are reviewed annually using rubric Rubric 3d.	6 students completed UST 601 in 2006-2007. Excellent: 67% Unacceptable: 33%	Results of data are reviewed by the MAES Program Director, Department Chair. Results are reported to the MAES faculty and significant findings are discussed at the fall faculty meeting, appropriate actions are agreed upon.	Results are satisfactory. No action is necessary at this time.