



Annual Report on Program Learning Outcomes Assessment

Program: MA in Energy & Environmental Analysis

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The Department of Earth & Environment has recently submitted (October 2015) a proposal to substantially revise the MA in Energy & Environmental Analysis; as part of this revision, the program will be renamed to MA in Energy & Environment. We reduced the total course requirements from 10 to 8 and revised the learning objectives for the revised program. The new learning objectives are listed below:

1. List the learning outcomes for the program:

- Demonstrate a thorough understanding of (a) one or more current energy and/or environmental issues along multiple dimensions (resources, technologies and markets), and their relationship of these dimensions to (b) fundamental concepts from economics and other social science disciplines (e.g., political science/international relations, or law), and (c) fundamental concepts from natural science (Content)
- Demonstrate knowledge of quantitative and qualitative theoretical frameworks and methodological approaches used to analyze environmental problems and understand the effectiveness of policy interventions (Methods and Tools)
- Quantitatively analyze data and perform simulation modeling to characterize the impacts of energy and environmental policies on human systems (Argumentation and Analysis)
- Communicate effectively concepts in the natural and social sciences as they relate to environmental issues, both in writing and verbally, and demonstrate a thorough understanding of the broader societal consequences of one or more environmental problems and policies (Communication)
- Apply analytical techniques from statistics, spatial science and economics to solve qualitative and quantitative problems in the design and implementation of policies to address environmental issues (Application)