



A successful programmatic structure and strategies to attract and educate students in earth and environmental sciences: an example from the University of Delaware, USA

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The achievement of sustainable use of our natural world is one of the major issues confronting humankind today. Environmental issues are inherently complex and difficult to resolve. Successful resolution of our most pressing environmental problems, such as climate change and ocean acidification, will require well-trained earth and environmental scientists that think critically in a multi-dimensional framework at variable spatial and temporal scales. This begs the question as to how we can both attract and successfully educate students in such a way that will permit them to tackle the multitude of environmental problems currently facing society. This poster details one way to successfully attract and train students in an interdisciplinary environmental education framework by sharing: (1) some of the successful strategies and programmatic structure of the University of Delaware's undergraduate environmental programs that have grown over 60% in two years after a major programmatic revision; and (2) the current round of programmatic revisions that will complete the strategic planning process.*

The interdisciplinary environmental education program at the University of Delaware has a strong programmatic core that provides students with the requisite quantitative training and field experience to solve complicated environmental issues. At the same time, the environmental program includes the social, political, and economic contexts of environmental issues. Together, these two parts of the core best equip students to mitigate environmental problems. Following a strategic planning effort, the University of Delaware is building upon past successes in training environmental scientists and managers by further reformulating its environmental programs to leverage the power of theme-based learning which complements the programmatic core in such a way to teach problem-solving skills. This poster details the multidimensional nature of the University of Delaware's environmental programs and the revised program structure that seeks to strike a balance between quantitative science, adaptive management, and solutions oriented thinking.

*Please note that the planning process for the environmental programs was and is the collective effort of many dedicated people. Current members of the advisory Environmental Council include Drs. Delphis Levia (Program Director), Nancy Targett (Dean and Council Chair), Frank Newton, Tracy Deliberty, Tom Sims, John Madsen, Paul Imhoff, Jan Johnson, Jerry Kauffman, Murray Johnston.