

Executive Summary for Environmental Studies Program

It is now widely agreed that environmental issues, from climate change to land and water usage, to alternative energy, represent critical challenges for society. NIU is poised to develop a new program in Environmental Studies that will allow our students to develop careers in diverse and rapidly developing environmental fields, which in 2008 were forecasted to have grown 24%. The Environmental Studies Program will be a rigorous interdisciplinary undergraduate and graduate program with the overall goal to address societal and scientific needs for a greater understanding of environmental issues.

Recognizing the complexity of environmental issues, we are taking a holistic approach that connects energy (particularly alternative energy for Illinois), foundational and applied environmental science, with societal and policy issues. The strategies are twofold: to train people in a broad-based environmental studies curriculum that complements our existing focused programs; and to strengthen our research in environmental and alternative energy issues. The program will produce citizens prepared to meet these challenges via careers in industry, small business, federal, state and local governments, non-governmental organizations (NGO), and academic research.

The first strategy will be the development of a world-class comprehensive and competitive undergraduate program in Environmental Studies, with subsequent growth of a graduate program. Expanding NIU's existing strengths and broadening the pool of Environmental Studies faculty across campus will result in a program that will attract students and researchers to NIU. The program will consist of both BA and BS tracks in natural sciences, social sciences, or engineering. The BA degree will emphasize the interconnections of environmental science, decision making and policy, and the societal impacts. For the BS degree the student will select a disciplinary specialization that might include energy, climate change, biodiversity, and water science. This new undergraduate program can also be linked with the NGO program, museum studies, and other majors already on campus to allow the students to see the interconnection between disciplines related to the environment.

The second strategy will be the development of a research program in environmental studies and alternative energy issues. Through multidisciplinary and integrative research the Environmental Studies program seeks to: (1) evaluate the nature and magnitude of environmental and climatic change at local, regional and global scales, (2) understand and explore solutions to our energy challenges, and (3) assess the impact of environmental, climatic, and energy challenges on society and contribute toward the development of a public policy that promotes sustainability. The multidisciplinary research at the core of the program will directly enhance NIU's research into climate, the environment and energy issues by encouraging communication among different research groups on campus and fostering shared analytical facilities between Departments and Colleges.

Overall, this new program will train students in the causes, scales, and remediation and mitigation approaches to major local, regional and global environmental problems. Students will acquire awareness of the complexity of factors relating to human interactions with the environment, with an eye toward workable solutions to important energy and environmental issues.