PH.D. IN ECOLOGY, HUMAN-ENVIRONMENT INTERACTIONS SPECIALIZATION

Graduate Degree Program in Ecology
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The Graduate Degree Program in Ecology (GDPE) offers outstanding opportunities for graduate studies ecology, including social-environmental systems. Students can specialize in Human-Environment Interactions as part of their PhD in Ecology degree plan. The HEI program aims to develop students as scientists and policy makers with interdisciplinary problem-solving skills focused particularly on social-environmental approaches to addressing global challenges in the ecological sciences from local to global scales. Students specializing in Human-Environment Interactions engage in independent and collaborative research guided by advisors in the program.

Program Learning Objectives

Students who earn a Ph.D. must demonstrate significant intellectual achievement, scholarly ability, and breadth of knowledge. Successful students in this Ph.D. program demonstrate the following:

1. Mastery of concepts and principles of ecology and working knowledge of relevant basic biology and quantitative and qualitative methods, achieved through required and elective coursework;
2. Ability to critically review and interpret scientific information and originality in integrating that information to design research pertinent to human-ecological issues. This ability is assessed through the research proposal and written and oral components of the Ph.D. preliminary examination;
3. Understanding and practice of research ethics, collaborative approaches, and broader issues related to social responsibility through coursework and research projects;
4. Proficiency in (1) written communication shown in the research proposal, dissertation and, ideally, peer-reviewed research articles, and (2) oral communication shown in presentations at professional conferences or in the classroom, and the dissertation seminar;
5. Understanding of social-ecological systems and how humans interact and influence their environments, and how those environments affect humans, achieved through required and elective coursework;
6. Appreciation of the need to include diverse stakeholder or rightsholder voices in development of solutions that sustain livelihoods and the environment achieved through required and elective coursework.

Institutional Learning Objectives

These Program Learning Objectives relate to CSU's Institutional Learning Objectives (Reasoning, Communication, Responsibility and Creativity) in several ways:

1. The first learning objective, focused mastery of concepts and principles of ecology gained through required and elective courses, develops Reasoning, Communication and Responsibility. For example, coursework fosters analytic skills and the ability to ask effective questions and using new knowledge or integrating across knowledge bases to develop innovative solutions to address societal challenges, as well as communicating scientific understanding.
2. The second learning objective, focused on understanding different ideas and diverse viewpoints, relates to Creativity, Reasoning, and Responsibility. For example, placing work into broad context includes development and application of logic, and understanding the diversity of human experiences.

Students interested in graduate work should refer to the Graduate and Professional Bulletin (http://catalog.colostate.edu/general-catalog/graduate-bulletin/) or visit the Graduate Degree Program in Ecology (https://ecology.colostate.edu/) website for more information.