MAJOR IN ECOSYSTEM SCIENCE AND SUSTAINABILITY

The major in Ecosystem Science and Sustainability provides a strong scientific foundation in ecosystem ecology integrated with a broad knowledge of the cultural, social, economic, and political issues that are shaping the issue of sustainability. Students in the major learn to integrate science into real-world decision making, with the goal of developing sustainable strategies to maintain ecosystem services around the globe. We provide students with a broad base of experiential and collaborative learning opportunities, opportunities for undergraduate research, and the latest scientific knowledge about sustainability science and how organisms interact with their environments to form complex ecosystems. Opportunities for research, internships, practical and group-based learning, and field experiences in the beautiful Rocky Mountains and around the world, combined with an outstanding classroom education, build a solid foundation for applying sustainable resource management principles.

Learning Objectives

Upon successful completion of this program, students will be able to:

1. Articulate core concepts from the natural and social sciences as they relate to ecosystem science and sustainability science.
2. Describe how organisms interact with their environments and how ecosystems support human well-being.
3. Apply a systems approach across scales to analyze the complexities, connections, and challenges within socio-ecological systems.
4. Collect, analyze, and interpret quantitative and qualitative information using approaches common to ecosystem and sustainability sciences.
5. Communicate effectively in oral and written form, and collaborate in teams to address ecosystem science and sustainability challenges.
6. Apply problem-solving skills that incorporate multicultural perspectives to achieve an equitable and more sustainable world for all.

Potential Occupations

Completion of the undergraduate degree qualifies students for a wide variety of careers related to sustainability and natural resource science. Examples of possible careers include: sustainability coordinator, ecologist, environmental educator, invasive species specialist, biological science technician, climate change scientist, natural resource specialist, or corporate environmental consultant. Students completing the undergraduate degree in Ecosystem Science and Sustainability will also be well prepared to succeed in graduate education in a variety of disciplines.

Undergraduate Advising

Would you like to learn more from a Peer Mentor or Academic Success Coordinator?
Please visit our ESS Advising page here (https://warnercnr.colostate.edu/ess/advising-student-resources/).