

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

1. **Systems understanding:** Identify and distinguish system components and their interactions to explain and illustrate systems understanding.
2. **Ecosystem content and principles:** Identify, analyze, synthesize, and assess fundamental ecosystem concepts.
3. **Sustainability content and principles:** Understand and apply insight and understanding of ecosystem concepts and how these principles contribute to sustainable strategies for society.
4. **Ecosystem science and sustainability methods:** Discriminate among methods and apply these to examine complex ecosystem processes and sustainability issues.
5. **Problem solving:** Work independently and efficiently in teams, demonstrate respect for alternative points of view, and communicate and engage effectively, solving problems using a diverse set of analytical and applied tools.

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/ess-undergraduate-degree-tracks/advising-student-resources/>).