

MINOR IN SOIL ECOSYSTEMS SCIENCE AND CONSERVATION

The minor in Soil Ecosystems Science and Conservation is designed to equip students with a functional understanding of soil ecosystems and their critical role in environmental sustainability. The purpose of this minor is to combine the fundamental sub-disciplines of soil science to provide non-majors the essential elements of soil science.

Learning Objectives

Students will:

1. Evaluate the physical, chemical, and biological properties of soils, as well as the complex interactions and processes that occur within soil ecosystems.
2. Apply the methods for assessing soil health, including soil sampling techniques, laboratory analysis, and interpretation of soil data to identify factors affecting soil productivity.
3. Apply strategies for conserving and managing soil ecosystems to ensure their long-term sustainability.
4. Examine the role of soil ecosystems in sustainable agricultural practices that promote sustainable food production while minimizing environmental impacts.
5. Describe the role of soil science in land-use planning and decision-making processes.
6. Apply an interdisciplinary perspective by integrating knowledge and addressing real-world challenges related to soil ecosystems and conservation.