SCI 112: Principles of Ecology

An introduction to basic principles of ecology. The interaction of abiotic and biotic components of ecosystems are discussed as well as the effects of human intervention. Some labs are field trips. Three lecture hours and two laboratory hours per week. Instructional Support Fee applies. Gen. Ed. Competencies Met: Scientific Reasoning and Discovery.

Course Student Learning Outcomes

1. Apply the scientific method to a variety of ecosystem-based problems, including both observational and experimental science, and incorporate the fundamental elements of experimental design. 2. Explain the significance of fundamental ecological concepts related to water and matter cycling, community ecology, population dynamics, ecological succession, and evolution. 3. Critically evaluate a variety of environmental problems and proposed solutions, including resource limitation, pollution, food shortages, and loss of biodiversity. 4. Explain the basic causes and mechanisms of global climate change, what is known, what is unknown, and how scientists are approaching the problem.
Credits: 4
Program: Science