Ecology and Environmental Science – C891

Overview

Ecology and Environmental Science is an introductory course for graduate students seeking initial licensure or endorsement and/or to earn their MA degree in secondary or middle grade science education. The course explores the relationships between organisms and their environment, including population ecology, communities, adaptations, distributions, interactions, and the environmental factors controlling these relationships. This course has no prerequisites.

Competencies

- **Ecosystems and Population Growth**
  The graduate examines ecosystems to analyze the relationship between populations and the environment.

- **Energy Flow in an Environment**
  The graduate examines the flow of energy in an ecosystem to assess how changes in that flow affect biodiversity.

- **Biogeochemical Cycles**
  The graduate analyzes biogeochemical cycles to explain the importance of these cycles to global processes.

- **Environmental Challenges**
  The graduate researches environmental challenges to discuss potential solutions.

- **Resource Management**
  The graduate assesses the challenges associated with resource management in order to compare potential sustainable solutions.

Learning

**Getting Started**

Welcome to Ecology and Environmental Science! This course uses the Cengage MindTap platform, which includes an e-text and a variety of activities such as knowledge checks, videos, and tutorials to help you learn about the relationship between organisms and their environment. You will have an opportunity to explore environmental science through hands-on lab experiments. This course also discusses the impact humans have on the environment. Competency will be demonstrated by successfully completing a performance assessment.

If you have not done so within a previous course, you will need to order your LabPaq from Hands-On Labs. This LabPaq is a physical shipment and contains equipment and supplies needed to complete science experiments at
Your LabPaq within a previous course, then there is no need to order another. Delivery of your LabPaq takes about 5-7 business days, so please order your LabPaq 1-2 weeks before starting your course to ensure you will have the supplies you need to complete the experiments.

If you are enrolled in the MASEB12: Master of Arts, Science Education (5-12, Bio) program, follow these instructions to order the Biological Science LabPaq. The contents of this LabPaq are used in four courses within your program: Molecular and Cellular Biology, Heredity and Genetics, Zoology, and Ecology and Environmental Science.

If you are enrolled in the MASEG12: Master of Arts, Science Education (5-12, Geo) program, follow these instructions to order the Geosciences LabPaq. The contents of this LabPaq are used in four courses within your program: General Physics, Geology I: Physical, Geology II: Earth Systems, and Ecology and Environmental Science.

If you are enrolled in the MASE9: Master of Arts, Science Education (5-9) program, follow these instructions to order the Middle School Science LabPaq. The contents of this LabPaq are used in three courses within your program: General Physics, Heredity and Genetics, and Ecology and Environmental Science.

Assessments

Performance Assessment: Ecology and Environmental Science

Status: Not Attempted
Code: KQP2

Course Information

The Writing Center
WGU Library
Accessibility Policy
Student Success Center
Pacing Guide

Course Instructor

Course Instructor Group

https://my.wgu.edu/courses/course/10020017