



## EGR 141: Introduction to Environment

This course is designed to examine the impact of human activities on the natural world in the context of our emerging awareness of the scope of environmental problems and against the background of our understanding of normal ecosystems. The focus will be on topics concerning population, agriculture, energy, air pollution, water resources and waste management. Three lecture hours per week. Competency met: Scientific Reasoning and Discovery Fall

### Course Student Learning Outcomes

1. Define what environmental science is and why it is considered interdisciplinary.
2. Identify some of the important environmental concerns we face today.
3. Explain what sustainable development is and how it relates to society.
4. Understand the Scientific Method and how it is used to study the environment.
5. Apply critical thinking to evaluate what is sound science.
6. Apply analytical skills, models, and statistics to the study of the environment.
7. Understand the concept of systems and their importance in environmental science.
8. Explain the processes which shape the earth including the rock cycle, plate tectonics, and global air and water circulation patterns.
9. Follow the movement of water and nutrients through the biological, chemical and geological systems on the planet.
10. Define population, community, ecosystem, biome and biosphere and understand their relationships.
11. Follow the movement of energy on the planet through biotic and abiotic systems.
12. Explain the concept of evolution and how it is the thread that links all forms of life together.
13. Understand our past, present and future uses of energy and the consequences of our actions.
14. Understand the concept of climate change and its causes and consequences.

**Credits:** 3

**Program:** Engineering