

ENVS101C : Fundamentals of Environmental Science

Provides an introduction to the structure, function, and interactions of atmospheric, terrestrial, and aquatic systems, as well as the impact of the human population on such systems. Topics will include basic scientific concepts and methods for understanding human population growth and their impact on the environment, including cycles of carbon, water, and other materials, weather and climate, and sustainability of natural resources, in particular water and energy. The course will evaluate natural environmental processes, as well as human impacts to these processes, using case studies and real data to demonstrate the role of science in solving pressing environmental problems. High school Biology and Chemistry are recommended.

Credits 4

Lab/Practicum/Clinical Hours 2

Lecture Hours 3

Learning Outcomes

Upon completion of this course, students will:

1. Apply the scientific method.
2. Demonstrate proper laboratory techniques and skills.
3. Explain the physical and chemical properties of water, carbon, nitrogen, and phosphorus.
4. Identify terrestrial biomes and characteristics of populations present in each.
5. Discuss human impact and species extinction.
6. Describe renewable and non-renewable energy sources.
7. Evaluate waste management techniques, mining methods, and sustainable solutions.