



Welcome to Environmental Science for non-science majors! In this course, you will hone your critical thinking skills and learn about how science gets done. You will learn about the scientific method and practice evaluating some of the claims you read about in the news and online. We'll study the basics of ecosystems and landscapes and build an understanding of the human relationship to the environment. We'll also investigate current environmental issues and what they mean for humanity. The goal of the course is for you to finish the term with a better understanding of the natural world around you and sharpened critical thinking skills!

1. Earth systems are made up of complex connections, interactions, and cycles. From the cycles of rocks, water, and oxygen to the impacts of humans on local, region, and global ecosystem, the environment of the earth is made up of interconnected relationships. **Unit 2** covers many of the basic cycles and levels of organization that provide the foundation for the study of environmental science. **Unit 3** covers landscape-level interactions and the effects of environmental change on various systems.
2. Scale is important; an ecosystem can be very small and local to planetary-scale. In the study of Environmental Science, we must be mindful of scale and whether we are discussing communities, populations, landscapes, or a global system. We touch on this concept in **Units 2-6**, particularly **Unit 4**, which cover the relationships between humans and their environment at various scales.

3. Humans are a part of the ecology and environment of Earth and we have distinct roles and impacts on the Earth system.

It can be easy to view humans as being separate from our environment. When we think of ecology, we often think of studies that do not involve humans. In **Unit 4** we study how humans interact with our environment and some of the impacts we have on it.

4. Scientific knowledge is important in understanding current events and informing personal worldview.

We currently have access to so much information via traditional news outlets and the Internet. Oftentimes, we read and hear conflicting information. How do we cut through the opinion and understand issues based on scientific study? In **Unit 1**, we discuss the importance of studying a field such as Environmental Science and introduce tools you can use to be a well-informed consumer.

5. Individual involvement can make a big difference.

When we study current events, environmental issues can start to seem overwhelming and too big for any one person to make a difference. In **Unit 1**, we cover how individuals and small groups can become actively involved in scientific projects and make real contributions. In **Units 4, 5, and 6**, we discuss various environmental issues and how humans are contributing to these issues and how individuals can affect change.

6. Sustainability and wise use of resources is important for our future development.

Some of Earth's resources are finite, such as fossil fuels, others renewable but scarce, such as water in some regions, other resources are renewable, such as the sun and wind. Using Earth's resources responsibly affects our current condition and future generations. In **Units 5 and 6**, we discuss the use of Earth's resources, the effects of unsustainable use, and ways we can ensure a sustainable future.