
SECTION HEADING

NSCI 1100: Issues in the Environment

Description

Issues in the Environment takes a broad look at environmental issues and explores in depth certain global, national, and local environmental problems. In addition to lecture, guest speakers, field trips, and videos may be used.

Credits

3

Prerequisite

STSK 0090 or placement by multiple measures

Corequisite

None

Topics to be Covered

1. Ecosystems
2. Biodiversity - sustaining it and interactions of organisms
3. Human population and urbanization
4. Climate and climate change
5. Air pollution and ozone depletion
6. Water resources and water pollution
7. Energy - Renewable and nonrenewable
8. Environmental hazards
9. Physical science of matter and biogeochemical cycling
10. Food soil and pest management
11. Invasive species
12. Waste management
13. Environmental sustainability

Learning Outcomes

1. Define biodiversity, climate, climate change, sustainability and ecosystems.
2. Identify the relationship between human actions and air pollution/water pollution/ozone depletion/environmental hazards/ climate change and how these issues impact economies and politics.
3. Identify renewable/nonrenewable energy sources and environmental hazards and explain how humans can influence the use/nonuse of these resources.
4. Illustrate biogeochemical cycles, how climate change occurs, and energy flow through ecosystems.
5. Identify ways to address local, regional and global environmental issues and live more sustainably.
6. List the factors that influence human population growth, urbanization, environmental politics and environmental economics.

Credit Details

Lecture: 3

Lab: 0

OJT: 0

MnTC Goal Area(s): Goal Area 08- Global Perspective, Goal Area 10: People and the Environment

Minnesota Transfer Curriculum Goal Area(s) and Competencies

Goal Area 08: Global Perspective

1. Describe and analyze political, economic, and cultural elements which influence relations of states and societies in their historical and contemporary dimensions.

Section Heading

2. Demonstrate knowledge of cultural, social, religious and linguistic differences.
3. Analyze specific international problems, illustrating the cultural, economic, and political differences that affect their solution.
4. Understand the role of a world citizen and the responsibility world citizens share for their common global future.

Goal Area 10: People and the Environment

1. Explain the basic structure and function of various natural ecosystems and of human adaptive strategies within those systems.
2. Discern patterns and interrelationships of bio-physical and socio-cultural systems.
3. Describe the basic institutional arrangements (social, legal, political, economic, religious) that are evolving to deal with environmental and natural resource challenges.
4. Evaluate critically environmental and natural resource issues in light of understandings about interrelationships, ecosystems, and institutions.
5. Propose and assess alternative solutions to environmental problems.
6. Articulate and defend the actions they would take on various environmental issues.