

Environmental Science
1st Semester

CONTENT

DATE

INTRO. TO ENVIRONMENTAL SCIENCE

August 6 - 7

- Lab: Introduction to Lab Safety

ENERGY AND MATTER IN ECOSYSTEMS

August 10-September 18

- Population Ecology
- Community Ecology
- Energy Flow in Ecosystems
- Lab: Local Food Webs
- Project: Energy Flow in Ecosystems
- Nutrient Cycles
- Water Cycle
- Lab: Building a Model Watershed
- Terrestrial Biomes
- Project: Terrestrial Biomes
- Aquatic Life Zones
- Lab: Descending into the Depths
- Freshwater Life Zones
- Lab: Freshwater Life Zones

STABILITY AND CHANGE IN ECOSYSTEMS

September 21-October 30

- Earth's Atmosphere
- Lab: Air Pressure
- Weather and Climate
- Atmospheric Circulation
- Lab: Atmospheric Circulation and Patterns
- Ecological Succession
- Ecology
- Project: Ecology
- Evolution and Biodiversity
- Lab: Species Diversity
- Project: Evolution and Biodiversity
- Threatened and Endangered Species
- Lab: Oil Spill Experiment
- Project: Threatened and Endangered Species
- Protecting Biodiversity
- Project: Protecting Biodiversity

EFFECTS OF HUMAN POPULATION GROWTH ON GLOBAL ECOSYSTEMS

November 2-December 11

- Population Age Structure
- Project: Population Age Structure
- Effects of a Growing Human Population
- Project: Effects of a Growing Human Population
- Food Resources
- Lab: Food Resources

REVIEW AND EXAMS

December 14 - 18

Environmental Science
2nd Semester

CONTENT

DATE

HUMAN IMPACT ON NATURAL RESOURCES

January 4-March 5

- Pest Management
- Project: Pest Management
- Forestry
- Project: Forestry
- Rangelands
- Project: Rangelands
- Land Conservation
- Project: Land Conservation
- Mining
- Project: Mining
- Fisheries
- Introduction to Air Pollution
- Project: Introduction to Air Pollution
- Lab: Temperature Inversion
- Acid Deposition
- Lab: Acid Rain, Part One—Analysis
- Lab: Acid Rain, Part Two—Hands-on
- Project: Acid Deposition
- Climate Change
- Lab: Greenhouse Gasses and Climate Change
- Project: Climate Change
- Reducing Air Pollution
- Lab: How Green Is Your Car?
- Project: Reducing Air Pollution
- Noise Pollution
- Project: Noise Pollution
- Water Pollution
- Lab: Solubility Earth's Water 2
- Project: Earth's Water2
- Water Use 2
- Lab: Soapy Water 2
- Project: Water Use 2
- Water Conservation 2
- Lab: Water Conservation 2
- Soil 2
- Lab: Digging for Soil 2
- Soil Conservation 2
- Lab: Erosion Virtual Experiment 2
- Project: Soil Conservation 2

ENERGY RESOURCES

March 8-April 30

- Introduction to Energy
- Energy Consumption History
- Fossil Fuels
- Project: Fossil Fuels
- Lab: The Effects of an Oil Spill
- Coal
- Project: Coal
- Synthetic Fuels
- Lab: Energy of an Alternate Fuel Source
- Introduction to Nuclear Energy
- Project: Introduction to Nuclear Energy
- Nuclear Power Plants

Environmental Science
2nd Semester (Cont.)

CONTENT	DATE
ENERGY RESOURCES (Cont.) <ul style="list-style-type: none">• Lab: Nuclear Chain Reaction• Project: Nuclear Power Plants• Nuclear Energy and the Environment• Project: Nuclear Energy and the Environment• Hydroelectric Power• Project: Hydroelectric Power• Tides and Waves• Project: Tides and Waves• Lab: What Can a Wave Do?• Solar Energy• Lab: Solar Energy• Wind Power• Project: Wind Power• Geothermal Power• Project: Geothermal Power• Hydrogen Fuel• Project: Hydrogen Fuel• Energy Efficiency• Lab: Energy Use and Your Family• Project: Energy Efficiency• Sewage Treatment• Solid Waste• Project: Solid Waste• Lab: Solid Waste• Hazardous Waste• Project: Hazardous Waste• Environmental Health• Project: Environmental Health• Sustainable Cities• Project: Sustainable Cities• Environmental Economics• Project: Environmental Economics• Lab: An Environmental Science Field Trip	March 8-April 30
CULMINATING PROJECT	May 3-May 14
REVIEW	May 17 - 21
FINAL EXAMS	May 24 - 26