

THE ENVIRONMENT

GEOG/ENST 1150 Fall 2025

Instructor: Dr. Adam Cornwell
(he/him)

Office: RC 2006C
Office Hours: Mondays 2 – 3, Wednesdays 3 – 4
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Description

Current environmental issues will be examined using a geographical approach that stresses the interrelationships between environments and societies. The major physical and societal components of the earth/atmosphere system will be introduced to provide a base for the understanding of the nature and development of modern environmental concerns. Often these concerns are not completely new but have evolved over decades or even centuries. The histories, characteristics, and impacts of specific problems will be examined in detail and potential solutions will be evaluated through exploration of perspectives including technology, politics, economics, and planning and management.

Course Textbook

Dearden, Bruce, O’Connell, and Lantz (2025). *Environmental Change and Challenge (7th Edition)*, Oxford University Press, Don Mills, Ontario, Canada.

Students will be assigned readings from the text to complete *before each lecture*.

Evaluation Scheme

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|----------------------|------------|-------------|
| Term Test 1 | 25% | October 7 |
| Term Test 2 | 25% | November 11 |
| Participation | 10% | |
| Final Exam | 40% | TBA |

Participation opportunities will be described in class. There will be weekly lab exercises, two term tests, and a final examination. All tests will be administered in person.

Lecture Times

Tuesdays and Thursdays: 8:30 – 10:00 am, RB 1042

Schedule of Topics (subject to changes as necessary)

| Date | Reading | Topic |
|--------------|----------------|--|
| September 2 | | Introduction |
| September 4 | Chapter 1 | Systems Thinking and Sustainability |
| September 9 | Chapter 2 | Responding to Global Change |
| September 11 | Chapter 3 | Energy and the Biosphere |
| September 16 | Chapter 4 | Ecological Succession |
| September 18 | Chapter 4 | Ecosystem Change |
| September 23 | Chapter 5 | Biodiversity |
| September 25 | Chapter 6 | Biogeochemical Cycles |
| September 30 | | National Day for Truth and Reconciliation |
| October 2 | Chapter 6 | Disrupted Cycles |
| October 7 | | Term Test 1 |
| October 9 | Chapter 7 | Global Climatic Change |
| October 14 | | Study Week |
| October 16 | | Study Week |
| October 21 | Chapter 7 | Climate Impacts and Adaptation |
| October 23 | Chapter 7 | Climate Change Mitigation and Policy |
| October 28 | Chapter 8 | Ocean Ecosystems |
| October 30 | Chapter 8 | Ocean Management |
| November 4 | Chapter 9 | Forests and Harvests |
| November 6 | Chapter 9 | Forest Management |
| November 11 | | Term Test 2 |
| November 13 | Chapter 10 | Agriculture |
| November 18 | Chapter 10 | Sustainable Food Production |
| November 20 | Chapter 11 | Fresh Water |
| November 25 | Chapter 11 | Water Resource Management |
| November 27 | Chapter 13 | Perspectives on Change |
| December 2 | Chapter 14 | Management Processes and Methods |

Learning Outcomes

Knowledge

- Understand the basics of ecosystem relationships and succession
- Follow the energy flows through ecological systems and the hydrosphere, lithosphere, and atmosphere
- Connect the relationships between ecological systems and the exploitation of natural resources, including ocean, forest, agricultural, mineral, and water resources
- Consider political and economic restraints on current systems and implications for change
- Apply these principles to current issues and case studies in Canada and around the world

Skill Development

- Tracing through the major biogeochemical cycles and analysis of the consequences of various disruptions to these cycles
- Evaluation of practices for managing environmental impacts
- Application of sustainable development principles to environmental systems

Course Delivery

The primary mode of contact will be lectures during the scheduled time periods each week. It is possible that this will change if circumstances warrant.

Course materials will be delivered through the **Desire2Learn** platform on CourseLink.

The 7th edition of the textbook is currently available through the [LU Bookstore](#) for \$134.99. Older editions are acceptable, but students should be aware that some chapters and information may be missing or presented in a different order from what appears in this syllabus.

LU Accommodation Statement

Lakehead University is committed to achieving full accessibility for persons with disabilities/medical conditions. Part of this commitment includes arranging academic accommodations for students with disabilities/medical conditions to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability/medical condition and think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please email sas@lakeheadu.ca or visit <https://www.lakeheadu.ca/faculty-and-staff/departments/services/sas>.