# THE ENVIRONMENT

## **GEOG/ENST 1150 Fall 2021**

Instructor: Dr. Adam Cornwell Office: RC 2006D

acornwel@lakeheadu.ca

### **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, Philip, Bruce Mitchell, and Erin O'Connell (2020). *Environmental Change and Challenge (6th Edition)*, Oxford University Press, Don Mills, Ontario, Canada.

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

#### **Evaluation Scheme**

Term Test 1	20%	October 4
Term Test 2	20%	November 3
Term Test 3	20%	November 24
Final Exam	40%	TBA

There will be three term tests, and a final examination. All tests will be administered on-line in an open-book format.

#### **Lecture Times**

Monday: 5:30 - 7:00 pmWednesday: 5:30 - 7:00 pm

# **GEOG/ENST 1150 Lecture Schedule**

# (subject to changes as necessary)

Date	Reading	Topic
September 8		Introduction
September 13	Chapter 1	Management and Sustainability
September 15	Chapter 2	Responding to Global Change
September 20	Chapter 3	Energy and Ecosystems
September 22	Chapter 3	Biodiversity
September 27	Chapter 4	Ecosystem Dynamics
September 29	Chapter 4	Ecosystem Change
October 4		Term Test 1
October 6	Chapter 5	Biogeochemical Cycles
October 11		Study Week
October 13		Study Week
October 18	Chapter 5	Disrupted Cycles
October 20	Chapter 8	Climate Change
October 25	Chapter 8	Adaptation and Mitigation
October 27	Chapter 9	Ocean Ecosystems
November 1	Chapter 9	Ocean Management
November 3		Term Test 2
November 8	Chapter 10	Forests
November 10	Chapter 11	Agriculture
November 15	Chapter 11	Sustainable Food Production
November 17	Chapter 12	Water
November 22	Chapter 12	Water Resource Management
November 24		Term Test 3
November 29	Chapter 13	Minerals and Energy
December 1	Chapter 14	Urban Environmental Management
December 6	Chapter 15	Protected Areas

## **Learning Outcomes**

### Knowledge

- Follow the energy flows through ecological systems and the hydrosphere, lithosphere, and atmosphere
- Understand the basics of ecosystem relationships and succession
- 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
- Appreciate the processes of assessment, planning, and management as applied to case studies

### **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**

In accordance with the safety protocols at Lakehead University during the pandemic of Fall 2021, this course will be delivered using on-line methods. The primary mode of contact will be synchronous lectures during the scheduled time periods each week.

Course materials and tests will be delivered through the **Desire2Learn** platform at MyCourselink. Lectures will be hosted by the instructor using the **Zoom** platform; links to the sessions are in the MyCourseLink Calendar. Class activities will be shared among classmates using **Google Docs**.

Recordings of **Zoom** lectures and **Google Docs** will be made available asynchronously for students who are unable to attend the lectures at the scheduled times, due to technical limitations or other reasons. Students are responsible for keeping up with the class.

### **LU Notice for Recording Lectures and Class Activities**

In GEOG/ENST 1150, in the context of remote instruction and participation, video and audio recordings of class activities will be made to ensure students' and instructors' easy and comprehensive access to those activities. The recordings are confidential and are intended only for the use of the course students and instructors. They may otherwise not be used or disclosed. During recording, to protect others' privacy, each student should ensure that no one else is present in the location where they are being recorded without that non-student's consent. The recordings are made under the authority of sections 3 and 14 of The Lakehead University Act, 1965. Questions about the collection of the images and sounds in the recordings may be directed to the Dean of Science and Environmental Studies, ses@lakeheadu.ca.

### **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 <a href="mailto:sas@lakeheadu.ca">sas@lakeheadu.ca</a> or visit <a href="https://www.lakeheadu.ca/faculty-and-staff/departments/services/sas.