

ENST 4810: Environmental Sustainability 2024WA

Tuesdays 2:30pm - 5:30pm (Jan 9 - Apr 9)

Room: RC 2005

Instructor: Dr. Robert M. Stewart rob.stewart@lakeheadu.ca

The concepts and methods of achieving environmental and economic sustainability are examined. Students will explore potential career paths and related work activities that will allow them to assist their future employers in achieving their environmental goals, such as reducing their negative ecological footprint. Students will also explore recent advancements in various technologies or business processes that promote ecological/ environmental sustainability.

Marking Scheme	%	Due Date
Participation	35	Weekly
Research Proposal	15	February 13
Research Paper	30	March 26
Final Research Presentation	20	April 2 nd and 9 th

Week	Topic	Learning objectives
Jan 9	What is Sustainability?	<ul style="list-style-type: none"> • Collapse and Upheaval • NEXUS Food, Water, Energy • Cultural Adaptation
Jan 16	A History of Sustainability	<ul style="list-style-type: none"> • Globalization • The Rio Summit • Anthropocene
Jan 23	The Growth Paradigm	<ul style="list-style-type: none"> • Limits to Growth • Environmental Kuznet Curve • Demographic Transition • Responsibility and Inequity
Jan 30	Sustainability Indicators	<ul style="list-style-type: none"> • Maximum Sustainable Yield • Conflict and Collapse • Science/Policy Indicators • Cop15/Cop28 Strategies
Feb 6	<i>Research Proposal Prep Tutorial</i>	
Feb 13	<i>Research Proposal Presentations</i>	
Feb 20	READING WEEK	
Feb 27	Urban Transformation and Design	<ul style="list-style-type: none"> • Urban Sustainability • Urban Assessments • Canadian Cities Solutions
Mar 5	Planning and Governance	<ul style="list-style-type: none"> • Sustainability Strategies • Municipal Sustainability • Campus Sustainability • Household Footprint
Mar 12	Global Commons and Environmental Justice	<ul style="list-style-type: none"> • Vulnerability and Resilience • Indigenous Reconciliation • Global Commons
Mar 19	<i>Research Paper Editing Tutorial</i>	
Mar 26	<i>Research Paper Submission Review</i>	
April 2 & 9	<i>Student Presentations</i>	