

Brief Course Outline

Course Title: Environmental Science and Sustainability

Course Number and Section:

ENVIRSCI

1021F 551

Instructor Name(s): Andrea Butnari

Instructor Email(s): aboyer@uwo.ca

Disclaimer: Information in the brief course outline is subject to change. The syllabus posted on OWL is the official and authoritative source of information for the course.

Course Description:

This course is intended to give you the scientific background and skill set required to think critically about emerging environmental issues (e.g., climate change, agricultural impacts, air pollution, etc.). The course focuses on the practical and applied aspects of environmental science through studying environmental problems in terms of their causes, assessment, and solutions. We will tackle the most pressing environmental issues including the loss of biodiversity, food provision and security, water security, supply and pollution, plastic waste, air pollution, the mining and oil industry, sustainable development, energy production, and climate change.

Learning Outcomes:

- Environmental knowledge - Summarize a range of pressing environmental problems, identify their causes and consequences and discuss possible solutions;
- Environmental awareness - Appreciate, value and respect the environment and the role of society in it, along with the diverse viewpoints and perspectives of stakeholders;
- Scientific literacy - Identify the validity of scientific sources, synthesize and critically analyze the existing literature on environmental topics, interpret graphical representations of data;
- Scientific writing - Apply practical skills in scientific writing to convey detailed information about an environmental topic and incorporate feedback.

Textbooks and Course Materials:

All course materials will be posted to OWL Brightspace. We are using a set of interactive course notes developed specifically for ES1021 in place of a textbook. The notes include YouTube videos, interactive data visualizations, embedded links to websites, short video lectures, mini-applications and more. There is no cost associated with the course materials.

Methods Of Evaluation:

Assignment	Due Date mm/dd/yy	Weight - %
Online quizzes (weekly)		10

Assignment	Due Date mm/dd/yy	Weight - %
Midterm		15
Final exam		35
Topic selection assignment	09/19/25	10
Mini-review	10/24/25	20
Response to reviewer assignment	12/05/25	10

In solidarity with the Anishinaabe, Haudenosaunee, Lūnaapéewak, and Chonnonton peoples on whose traditional treaty and unceded territories this course is shared.

Friday, August 15, 2025