

Environmental Science 1021F

Environmental Science and Sustainability

Fall 2024

Course Instructor

Name: Dr. Andrea Butnari
Office hours: By appointment; BGS 1018 or Zoom
Email: aboyer@uwo.ca

Questions about course material, structure and organization, exams, and accommodation should be directed to your course instructor.

Course Structure

You will be assigned to a specific TA who will help mentor you throughout the scientific literacy and communication aspect of the course. Your TA will act as your first point of contact for any inquiries regarding your writing assignments.

Your TAs will be available by email and via Zoom and you may ask to set up appointments with them. You have been assigned to a TA based on your surname. This information is available on OWL under Communications > Groups.

Teaching Assistant	Email
Benjamin Fordjour	bfordjou@uwo.ca
Cailin Gallinger	cqallin4@uwo.ca
Hana Hopson	hhopson@uwo.ca
Sharini Kanni Suresh Babu	skannisu@uwo.ca

Course Prerequisites

Pre- or co-requisite: There are no pre-requisites for the course.

Class lectures: W 6:30-9:30pm NSC 145

Course description and details:

This course is divided into two key components:
Environmental understanding and awareness
Scientific literacy and communication

Environmental understanding and awareness (60% of your overall mark)

Every day, the media reports on many environmental issues including the loss of insect pollinators, the development of oil pipelines, and changing climate. This course is intended to give you the scientific background and skill set necessary to think critically about these issues. 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. Throughout the course, students will apply their foundational knowledge to work through case studies based on current issues and learn about strategies that are used to mitigate and manage topical issues of environmental concern.

<p>This aspect of the course will be delivered through:</p> <ul style="list-style-type: none"> Interactive course notes Course readings In-person lectures 	<p>And will be assessed through:</p> <ul style="list-style-type: none"> Weekly quizzes Examinations (midterm and final exam)
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Scientific Writing and Communication (40% of overall mark)

ENVIRSCI 1021F is an essay course. An essay is defined by the university as:

The term "essay" is to be understood broadly to include many of the reports, reviews, summaries, critiques, and some laboratory reports that are currently assigned, as well as essays in the strictest sense. The essential point is that the assignments involve assembling information and argument and presenting it in connected prose.

set of assignments that are designed to help you develop your skills in scientific writing. Your writing assignment will mimic the research, writing, and revision cycle of a scientific article and will help you gain practical skills in scientific writing.

<p>This aspect of the course will be delivered through:</p> <ul style="list-style-type: none"> Assignment instructions Writing tutorials Discussions with your TA 	<p>There will be three assessed components of this part of the course:</p> <ul style="list-style-type: none"> Annotated bibliography Mini-review (1200 words) Response to reviewer
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Please note: You cannot pass the course without passing the writing assignment portion.

Learning Outcomes

Upon completion of this module, students should be able to:

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

important for the midterm and final exam. It is important to note that it is your responsibility to read the course notes before attending lecture as we will not explicitly discuss all of this information during lecture.

Why use this format instead of an official textbook?

It is more concise - Textbooks are big. Publishers include a lot of information in their chapters, I've purposefully kept the writing to more of a conversational tone and tried to be succinct and concise.

Expense - If I thought not having a textbook would hamper your ability to learn about environmental issues, we would have one. But I think that this is a more flexible and adaptable format that also comes with the bonus that it is free!

Updates - Things in the environmental sector change rapidly. Printed textbooks are inherently behind before they even sell their first copy. As much as we can, we will be dealing with issues as they emerge and having a set of online course notes allows us to do that.

Course notes will be released at the beginning of every week; however, you can see the line-up for the entire semester in the course timetable below.

Course Readings

In addition to reading the weekly interactive course notes, you have a set of weekly course readings as well. The course readings are aligned to weekly lecture topics and are selected to (1) demonstrate a variety of scientific writing styles (scientific articles, informal articles, media articles, blogs, etc.), (2) further your knowledge about environmental issues, and (3) help prepare you for your examinations. Your course readings are mostly drawn from the scientific literature, but they may also include shorter, more informal articles as well.

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The course is assessed via a diverse range of methods that are designed to help you learn the material and develop your practical skills.

Environmental knowledge and awareness (60% of overall mark)

- 10% Online quizzes (weekly)
- 15% Midterm
- 35%

Scientific literacy and communication skills (40% of overall mark)

- 10% Annotated bibliography
- 20% Mini review
- 10% Response to reviewers

All written assignments are due at [6:30pm EST] unless otherwise specified

Written assignments will be submitted to Turnitin (statement in policies below)

Every deadline for any assignment **has an automatic grace period of 48 hours** (you do not need to contact the instructor to ask for this grace period, it is automatically given).

More information on: Environmental knowledge and awareness (60%)

Online Quizzes and Homework Activities (10%)

When a student *mistakenly* submits their one allowed Academic Consideration request **without supporting documentation** for the assessment listed above or those in the **Coursework with Assessment Flexibility** section below, the request cannot be recalled and reapplied. This privilege is forfeited.

Additional Statements

Religious Accommodation

When conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request an accommodation for their absence in writing to the course instructor and/or the Academic Advising office of their Faculty of Registration. This notice should be made as early as possible but not later than two weeks prior to the writing or the examination (or one week prior to the writing of the test).

holidays:

<https://www.edi.uwo.ca>.

Accommodation Policies

Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

[https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic Accommodation_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf).

Academic Policies

The website for Registrar Services is <https://www.registrar.uwo.ca/>.

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf,

the centrally administered e-university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

No electronic devices of any kind can be used on tests and exams.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

All assignments and essays must be written in your own words. Changing the word or sentence order or changing words using a thesaurus **does not** constitute original work. If you use an idea or excerpt from

another author, regardless of source type, you **MUST** reference it in the appropriate fashion as requested on the assignment. Details of how to do this will be provided to you.

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For this schedule, **test dates and due dates are firm**. The schedule of lecture material is tentative. The instructor reserves the right to change topics or introduce new topics if significant environmental issues should arise during the term or add articles to study.

Week	Date	Lecture Topic	Assignments & Readings
1	Sept 11	01 Æ Setting the Green Stage	Complete week #1 readings Submit weekly quiz #1 (Sept 13**)
		<i>Course expectations, scientific literacy, and welcome</i>	
2	Sept 18	02 Æ Silent Spring	Complete week #2 readings