

ENVIRSCI 2300F: Foundations in Environmental Science Course Outline 2026-2027



“Ophelia” by Sir John Everett Millais (1851-1852) reimagined by Quentin Devine (2022)

1. Course Information

Description: A foundational course exposing students to the interdisciplinary fields of environmental science by identifying how current environmental issues (e.g., resource extraction, climate change, etc.) are addressed by different disciplines. Sustainability metrics will also be explored. Students will work through insightful case studies and assess scientific literature from different stakeholder perspectives.

Lecture: Tuesdays (9:30–10:30 am) and Thursdays (9:30–11:30 am)

Prerequisites: Environmental Science 1021F/G, or any 0.5 Earth Sciences course at the 1000 level, or registration in any module within the Faculty of Science or Schulich School of Medicine and Dentistry, or permission of the Department.

Unless students have either the prerequisites for this course or written special permission from the Department of Earth Sciences to enroll in it, they may be removed and withdrawn from this course in accordance with university policy. This may be done after the add/drop deadline of the academic term, and the course will be marked as withdrawn (WDN) on their academic record. This decision may not be appealed.

2. Instructor Information

Instructors	Email	Office	Phone	Office Hours
Dr. Jeremiah (Jer) Shuster	jshuste3@uwo.ca	BGS 0164	NA	See below

Students must use their Western (@uwo.ca) email addresses when emailing me. You are welcome to stop by my office or make an (in-person or online) appointment to guarantee a time slot. Please feel free to ask questions, voice concerns, or discuss any suggestions.

3. Course Syllabus, Schedule, Delivery Mode

Course Topics and Approximate Timeline of Course Topics		
Date	Format	Topics and Themes
Week 1: Welcome to 2300F		
Sept 10	Class	Welcome to Foundations in Environmental Science (FES)
Week 2: The Geosphere		
Sept 15	Class	The Basics
Sept 17	Class*	The Challenges
Week 3		
Sept 22	No Class	Use this time to go outside.
Sept 24	No Class	Use this time to go outside.
Week 4: The Hydrosphere		
Sept 29	Class	The Basics
Oct 1	Class*	The Challenges
Week 5: The Biosphere		
Oct 6	Class	The Basics
Oct 8	Class*	The Challenges
Week 6		
Oct 13	No Class	Reading Week
Oct 15	No Class	Reading Week
Week 7: FES and Your Prospective Career		
Oct 20	Class	TBA
Oct 22	Class*	TBA
Week 8: FES and Indigenous Perspectives		
Oct 27	Class	Case Study
Oct 29	Class	Victoria Bomberry (Guest Speaker)
Week 9: FES and Legal Perspectives		
Nov 3	Class	Case Study
Nov 5	Class*	Paula Lombardi (Guest Speaker)
Week 10: FES and Educational Perspectives		
Nov 10	Class	Kristen Zinger (Guest Speaker)
Nov 12	Class	Case Study
Week 11: FES and Consulting Perspectives		
Nov 17	Class	Joel Lazenby (Guest Speaker)
Nov 19	Class*	Case Study
Week 12: FES and Health		
Nov 24	Class	Case Study
Nov 26	Class	Presentations
Week 13: FES and Improving Environmental Science Literacy		
Dec 1	Class	Presentations
Dec 3	Class	Presentations
Week 14		
Dec 8	No Class	...because why would we?

* Indicate in-class assignment

Learning Outcomes:

On successful completion of this course, you will be able to:

Critically Think

- Conduct and synthesize information while critically evaluating sources for credibility, relevance, and scientific rigor.

Communicate

- Write clear, concise, and reflective analyses on environmental topics and effectively communicate scientific findings to both expert and non-expert audiences.

Collaborate

- Work effectively within interdisciplinary teams, actively listening to and integrating perspectives from specialists outside your discipline.

Career-Driven

- Develop a deeper appreciation for the environment and its interconnected systems, while exploring how environmental knowledge and sustainable practices can be applied across a wide range of meaningful careers and professional pathways.

Key Sessional Dates for 2026:

Classes begin: September 9

Fall Reading Week: October 10 – 18

Classes End: December 9

Study Day: December 10

Exam Period: December 11 – 22

4. Course Materials

Textbooks: There are **NO** textbooks required for this course. A portion of your tuition fees contributes to Western's subscriptions to academic journals. You literally have access to a wealth of information that most of the world's population does not have. All course material will be posted to OWL:

<https://westernu.brightspace.com/>. I strongly encourage everyone to make use of the library resources while you still have access to them.

In-class Participation: This class may use Mentimeter or Kahoot. Either one of these apps can be accessed through your electronic device (e.g., smart phone, iPad, tablet, laptop).

OWL: Students are responsible for checking the course OWL site (<https://westernu.brightspace.com/>) regularly for news and updates. This is the primary method by which information will be disseminated to all students in the class. If students need assistance with the course OWL site, they can seek support on the [OWL Brightspace Help](#) page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Technical Requirements: To access course material (e.g., lecture slides, readings, etc.) an electron device and a stable internet connection is needed.

5. Methods of Evaluation

Grading Scheme and Assessment Dates

The overall course grade will be calculated as listed below:

Assignments (6) worth 30%

The assignments will involve guided reflective writing about material presented in class and the assigned readings. All assignments will be delivered, completed, and handed within the designated time (i.e., see * in the above Timeline). The purpose of having in-class assignments has multiple benefits (i.e., equal work ethic, promotes academic integrity, builds time management skills, reduces homework load and stress). If you cannot attend class to complete an assignment, you must notify me the day before class starts to discuss a reasonable alternative option. If an emergency arises, contact academic consideration.

Individual Project (1) worth 30%

The Independent Project will be assigned on September 10 and will be due October 6.

Group Project (1) worth 30%

You will be put into interdisciplinary groups to collaboratively work on a group project. More information about the project and how its assessment will be provided in class on 20 October 2026.

Attendance (10) worth 10%

Attendance will be taken on the days we will have guest lecturers and randomly throughout the semester.

Essential Learning Requirements

Even when Academic Consideration is granted for missed coursework, the following are essential to earn a passing grade in this course:

- a minimum of five entrees for the Individual Project to ensure that students demonstrate sufficient mastery of technical skills to progress,
- a passing grade on written, in-class assignments to satisfy the Senate requirement that students must demonstrate “some minimal competence in essay writing” to pass the course,
- participation in the Group Project and the presentations.

When a student has not demonstrated proficiency in an essential learning requirement listed above, and when the shortfall results from a granted Academic Consideration, they will be withdrawn (WDN) from the course. The student may appeal to the Associate Dean (Academic) for reinstatement with an Incomplete (INC) standing. Where an appeal for INC is granted, their maximum course load may be reduced during the term in which they complete the outstanding course requirements.

Use of Generative AI Tools

Generative AI tools (e.g., ChatGPT, Copilot, Gemini) are **prohibited** for assignments that will be completed within class hours. On the contrary, generative AI tools are **permitted with limitations** for Group Work.

Information about Missed Coursework

Students must familiarize themselves with the *University Policy on Academic Consideration – Undergraduate Students in First Entry Programs*, posted on the Academic Calendar:

https://uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf,

This policy does not apply to requests for Academic Consideration submitted for **attempted or completed work**, whether online or in person. The policy also does not apply to students experiencing

longer-term impacts on their academic responsibilities. These students should consult [Accessible Education](#).

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar's webpage: https://registrar.uwo.ca/academics/academic_considerations/ All requests for Academic Consideration must be made within 48 hours after the assessment date or submission deadline.

Deadlines: The 48-Hour No-Late-Penalty Period

The Independent Project includes an automatic 48-hour period after the deadline during which students may still submit without a late penalty. Specifically, the Independent Project is due on October 6; therefore, students may submit it until October 8 without penalty. After this 48-hour period, no further submissions will be accepted, and students do not need to request Academic Consideration for a missed deadline.

6. Additional Statements

6.1 Religious Accommodation

When a recognized religious holiday either requires a student to be absent from the University, or requires or prohibits an activity that makes it impossible for them to complete an academic requirement scheduled that day, they are entitled to accommodation. No student will be penalized for an absence for religious reasons, and an alternative means of satisfying the requirement will be arranged. This accommodation is provided in accordance with the University's policy on Accommodation for Religious Holidays:

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

The student should submit their requests through the Student Absence Portal (SAP), identifying the conflict and the specific course component(s) affected (e.g., test, midterm, exam).

Midterms and Tests: If a religious observance conflicts with a midterm test, they must submit their request no later than **one week** before the test. Their instructor will arrange an early sitting of the test. As set out above, no makeup test is offered for any other reason; this early sitting is available specifically for this accommodation.

Final Examinations: If a religious observance conflicts with the final exam, the student must submit their request no later than **two weeks** before the exam. Their instructor will arrange a Special Examination to take place no later than one month after the end of the examination period.

Students are responsible for finding out what was covered in any class they miss due to a religious observance, and for taking the appropriate steps to keep up with the course.

If a suitable arrangement cannot be reached between a student and their instructor, they should consult the Undergraduate Chair of the department offering the course, and if necessary, the Associate Dean (Academic) of the Faculty of Science.

For a list of recognized religious observances, please visit the calendars posted on the Equity, Diversity & Inclusion website - <https://www.edi.uwo.ca> (About Us – Resources – Additional Resources – Calendars).

6.2 Academic 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.

6.3 General Academic Policies

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

Use of @uwo.ca email: In accordance with policy, https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf, the centrally administered e-mail account provided to students will be considered the individual's official university email address. It is the responsibility of the account holder to ensure that emails received from the University at their official university address are attended to in a timely manner.

Requests for Relief (formally known as “appeals”)

Policy on Request for Relief from Academic Decision:

https://uwo.ca/univsec/pdf/academic_policies/appeals/requests_for_relief_from_academic_decisions.pdf

Procedures on Request for Relief from Academic Decision (Undergraduate):

https://uwo.ca/univsec/pdf/academic_policies/appeals/undergrad_requests_for_relief_procedure.pdf

6.4 Scholastic Offences

Policy on Scholastic Offences:

https://uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_offences.pdf

Procedures on Scholastic Offences (Undergraduate):

https://uwo.ca/univsec/pdf/academic_policies/appeals/undergrad_scholastic_offence_procedure.pdf

Use of Electronic Devices During Assessments

In courses offered by the Faculty of Science, the **possession** of unauthorized electronic devices during any in-person assessment (such as tests, midterms, and final examinations) is strictly prohibited. This includes, but is not limited to: mobile phones, smart watches, smart glasses, hidden cameras and wireless earbuds.

Unless explicitly stated otherwise in advance by the instructor, the presence of any such device at a student's desk, on their person, or within reach during an assessment will be treated as a scholastic offence, **even if the device is not in use**.

Effective September 2026, the typical penalty for this offence is a failing grade in the course AND a 12-month prohibition on retaking the course.

Only devices expressly permitted by the instructor (e.g., non-programmable calculators) may be brought into the assessment room. It is their responsibility to review and comply with these expectations.

Use of Generative AI Tools

Unless otherwise stated, the use of generative AI tools (e.g., ChatGPT, Microsoft Copilot, Google Gemini, or similar platforms) is **not permitted** in the completion of any course assessments, including but not limited to: assignments, lab reports, presentations, tests, and final examinations.

Using such tools for content generation, code writing, problem solving, translation, or summarization—when not explicitly allowed—will be treated as a **scholastic offence**.

If the use of generative AI is permitted for a particular assessment, the conditions of use will be specified by the instructor in advance. If no such permission is granted, students must assume that use is prohibited. It is the student's responsibility to seek clarification before using any AI tools in academic work.

6.5 Support Services

Academic Advising. Please visit the Science & Basic Medical Sciences Academic Advising webpage for information on adding/dropping courses, academic considerations for absences, requests for relief, exam conflicts, and many other academic-related matters: <https://www.uwo.ca/sci/advising/>.

Mental Health Support. Students who are in emotional/mental distress should refer to Mental Health@Western (<https://uwo.ca/health/>) for a complete list of options about how to obtain help.

Gender-Based and Sexual Violence. Western is committed to reducing incidents of gender-based and sexual violence (GBSV) and providing compassionate support to anyone who has gone through these traumatic events. If a student has experienced GBSV (either recently or in the past), they can find information about support services for survivors, including emergency contacts, at:

https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Accessibility for Coursework. A student may contact the course instructor if they require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to them. If they have any questions regarding accommodations, they may also contact Accessible Education at http://academicsupport.uwo.ca/accessible_education/index.html

Learning Development and Success. Learning-skills counsellors at Learning Development and Success (<https://learning.uwo.ca>) are ready to help students improve their learning skills. The facility offers strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Student Councils.

Student-run support services are offered by the University Students' Council (<https://westernusc.ca>) and the Science Students' Council (<https://www.westernssc.ca>).