



IES*2010 - Land-Based Teachings for Environmental Science and Practice

Fall 2026 Course Outline

Section: 01

Credits: 0.50

Land Acknowledgement: Guelph

The University of Guelph resides on the ancestral lands of the Attawandaron people and the treaty lands and territory of the Mississaugas of the Credit. We recognize the significance of the Dish with One Spoon Covenant to this land and offer respect to our Anishinaabe, Haudenosaunee and Métis neighbours. Today, this gathering place is home to many First Nations, Inuit, and Métis peoples and acknowledging them reminds us of our important connection to this land where we work and learn.

Calendar Description

Through Lands-based and experiential educational practices, appropriate to the patterns of the late summer cycle, students will further develop their knowledge, motivation, and skills toward facilitating the transmission of an Indigenous environmental consciousness in the field of environmental science and practice. In this course, students will examine the role of language and worldviews in thinking and communicating about relationships to the Land. They will practice the skills necessary to cultivate relationships and enact reciprocity with Indigenous peoples and communities and within Indigenous Lands. The course includes a seven-day overnight field trip the last week before Labour Day. There is no cost to students for the field trip. Students must be registered in the course before the field trip commences.

Prerequisite(s): IES*1020

Restriction(s): Restricted to students in BIESP, BIESPC.

Department(s): School of Environmental Sciences

Course Description

Through Lands-based and experiential educational practices, appropriate to the seasonality and location of the field course, students will further develop their knowledge, motivation, and skills in the field of Indigenous environmental science and practice. In this course, students will examine and reflect on the role of positionality, worldview, and action in thinking about and communicating our relationships with the Land. Students will practice the skills necessary to cultivate and strengthen their own relationship with the Land; develop a foundation for informed, respectful, reciprocal, and meaningful engagement with Indigenous and non-Indigenous partners; and consider how these practices might transfer to other places and contexts. Interactions with Elder(s) and environmental practitioners will deepen and broaden student understanding of Indigenous ways of being in nature and their implications for environmental science and practice.

The course will include monthly meetings throughout the fall semester as well as a one-week field trip (August 31-Sept 6) within the Robinson Huron Treaty area, where they will be immersed in environmental practice as we visit local First Nations.

Lecture Schedule

Tu 7pm-9:50pm in ALEX*309 (9/10 to 12/22)

Instructor Information

Claire Kemp

Email: ckemp01@uoguelph.ca

Learning Resources

Required Readings

Kimmerer, R.W. 2016. *Interview with a Watershed*. In *Forest under story: creative inquiry in an old growth forest*. Edited by Brodie N., Goodrich C., Swanson F. Washington University Press, Seattle. pp. 41–49.



Recommended Readings

Geniusz, M.S. 2015. *Plants Have So Much to Give Us, All We Have to Do is Ask*. University of Manitoba Press.

Johnston, B.H. 2003. *Honour Earth Mother*. Kegedonce Press.

Kimmerer, R.W. 2015. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*. Minneapolis, MN. Milkweed Press.

Reynolds, G. 2019. *Presentation Zen: Simple Ideas on Presentation Design and Delivery*.

Course Resources

For plant identification & information:

- *GoBotany*: <https://gobotany.nativeplanttrust.org>
- *Michigan Flora*: <https://michiganflora.net/family-key>
- *Flora of North America*: http://www.efloras.org/flora_page.aspx?flora_id=1
- *iNaturalist*: <https://www.inaturalist.org>
- *VasCan*: <https://data.canadensys.net/vascan/search>

For wildlife identification:

- *iNaturalist*: <https://www.inaturalist.org>
- *BugDex*: <https://dkbdigitaldesigns.com/bugdex/>

Campus Resources

If you are concerned about any aspect of your academic program: Make an appointment with an Academic Advisor (<https://www.uoguelph.ca/registrar/enrolment-records/academic-advisors>) in your degree program.

Academic Support

McLaughlin Library (<https://www.lib.uoguelph.ca/>) is a central place on campus for providing academic and research support to University of Guelph students. Meet with our staff (<https://www.lib.uoguelph.ca/using-library/appointment-booking/>), attend a workshop (https://cal.lib.uoguelph.ca/calendar/library_events/?t=g), or use our online resources (<https://learningcommons.lib.uoguelph.ca/>):

- Writing (<https://www.lib.uoguelph.ca/writing-studying/writing-resources-workshops/>) and English as an Additional Language (<https://www.lib.uoguelph.ca/writing-studying/english-language-support/>)
- Research Assistance (Finding Sources) (<https://www.lib.uoguelph.ca/writing-studying/research-assistance/>)
- Studying and Time Management (<https://www.lib.uoguelph.ca/writing-studying/studying-resources-workshops/>)
- Supported Learning Groups (SLGs) (<https://www.lib.uoguelph.ca/writing-studying/studying-resources-workshops/slgs/>)
- Presentations (<https://www.lib.uoguelph.ca/writing-studying/studying-resources-workshops/group-work-and-presentations/>)
- Data and Publishing (<https://www.lib.uoguelph.ca/scholarship-publishing/research-lifecycle-support/>)

Cost of Textbooks and Learning Resources

Textbook / Learning Resource	Required / Recommended	Cost
Interview With a Watershed	Required	No Cost

Students are advised that prices are often determined by the publisher or bookstore and may be subject to change.

Course Level Learning Outcomes

After completing this course, students will be able to;

1. Appreciate and respect the role of language and worldviews in thinking and communicating about ways of being in nature.
2. Identify key factors that must be considered in the application of Indigenous knowledge to environmental science and practice.
3. Recognize and explore intersections between knowledge systems and the impact on environmental science and practice outcomes.
4. Develop strategies to communicate across different knowledge systems.



5. Employ appropriate and practical approaches to cultivate relationships and enact reciprocity with Indigenous peoples through visits to First Nations communities.
6. Communicate in a respectful and meaningful way with someone who holds a different perspective.
7. Identify key similarities and differences between Indigenous and Western science knowledge systems with respect to underlying premises and methodologies and explore approaches to bridge these differences.
8. Reflect upon and describe their own relationship to the natural world in the context of Indigenous and Western scientific worldviews.

Teaching and Learning Activities

Topics

1. Review of the key elements and attributes of Indigenous ways of coming to know and being in nature.
2. Indigenous ecological knowledge and health
 - a. Individual physical, emotional, mental and spiritual well-being
3. How language shapes relationships to the Lands
 1. The importance of language as a vehicle for reflecting upon and expressing worldviews
 2. The role of language in thinking and communicating about worldviews and values and how language can present significant obstacles for Indigenous environmental science and practice and addressing resource and planning issues.
4. Learning about the Lands
 1. Walking with Elders and Knowledge Holders
 2. Lands-based teachings
 3. Being on the Land
 4. Widening the scope of moral consideration to encompass non-human persons in environmental practice.
5. Engagement between multiple knowledge systems:
 1. Building bridges and understanding
 2. Approaches central to Indigenous ways of knowing the natural world and Western scientific approaches to data collection and analysis.

Field Trip

In addition to monthly meetings throughout the fall semester, a one-week field trip will provide an opportunity for students to explore their relationship to the Land through observation, analysis, discussion and reflection.

The field trip will include interactions with Elders/Knowledge Holders and environmental practitioners on the Land, as well as independent observation and study of selected plants and animals. Students will explore plants and animals from a variety of perspectives including as teachers, relationship, Indigenous uses, spirituality, and conservation.

Assessments

Assessment will be based on a combination of journal entries (our relations, our teachers/tracking diary), engagement in activities, a plant collection, and a final presentation. The course assignments will include written and oral components.

Assessment Breakdown

Description	Weighting (%)	Due Date
Pre-Camp Survey	5%	August 21
Our Relations, Our Teachers	20%	October 6
Tracking Diary	10%	October 6
Bioblitz	10%	October 20
Plant Collection	30%	November 17
Final Presentation	10%	November 17
Course Engagement	10%	November 17
Final Reflection	5%	December 3



Last Day to Drop Course

The final day to drop Fall 2026 courses without academic penalty is the last day of classes: December 04

After this date, a mark will be recorded, whether course work is completed or not (a zero is assigned for missed tests/assignments). This mark will show on the student's transcript and will be calculated into their average.

Course Grading Policies

Submission of Assignments

Some assignments are to be submitted in person, while others can be submitted online through CourseLink.

Our Relations, Our Teachers is to be submitted via CourseLink, or in-person if submitting your journal.

Tracking Diary is to be submitted via CourseLink, or in-person if submitting your journal.

Bioblitz is to be submitted via CourseLink, with a direct link to your iNaturalist account for referencing submissions.

Plant Collection is to be submitted in person at the start of our class on November 17.

Final presentations will be in person during class on November 17. Any alternate arrangements must be made with the instructor by October 27 at the latest.

Late Assignment

Late assignments will be deducted 25% per day (including weekends) with a mark of zero being assigned after 2 days late.

Course Standard Statements

Course Policies

Field Camp

The field camp is a fully sober event. Students and the teaching team agree to fully abstain from the use of any recreational drugs and/or alcohol for the duration of the camp.

The field camp is meant to be a welcoming space for learning and growth. Participants are expected to come with an open mind, and to support their peers, understanding that everyone is at a different point in their learning journey.

The field camp may involve bringing you outside of your comfort zone. Participants are expected to embrace the learning journey, to ask questions when they arise, and to voice when they need support or accommodations.

The field camp will be a busy and tiring week, and it is essential for participants to ensure they are looking after themselves and each other. It is expected that all participants will contribute to completing camp tasks (cooking, tidying, fire building, etc), properly fuel/rest/dress, and support their peers.

Monthly Meetings

Please reach out to me ahead of time if you cannot make a class (unless it is one designated as an optional work period).

Experiential Learning Component

Experiential Learning (EL) at the University of Guelph means learning through action. EL activities provide students with the opportunity to apply course material to real-world, meaningful contexts.

This course has integrated the following Experiential Learning Components: Course-Integrated Learning (<https://www.uoguelph.ca/experientiallearning/students/search-experiential-learning-opportunities/curricular-and-course-based-opportunities-0>).

Upon successful completion, this experiential learning course will be reflected on the student's Professional and Career Development Record (PCDR). Learn about the PCDR and experiential learning at www.uoguelph.ca/pcdr (<https://www.uoguelph.ca/experientiallearning/pcdr>).

Standard Statements for Undergraduate Courses

Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-misconduct/>) is outlined in the Undergraduate Calendar.

Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability. Use of the SAS Exam Centre requires students to make a booking at least 10 business days in advance, and no later than November 1 (fall), March 1 (winter) or July 1 (summer). For students at the Guelph campus, information can be found on the SAS website. (<https://www.uoguelph.ca/sas>)

Accommodation of Religious Obligations

If you are unable to meet an in-course requirement due to religious obligations, please email the course instructor within two weeks of the start of the semester to make alternate arrangements.

See the Academic calendar for information on regulations and procedures for Academic Accommodations of Religious Obligations (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-accommodation-religious-obligations/>).

Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all undergraduate students except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in the Undergraduate Calendar - Dropping Courses (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/dropping-courses/>).

Email Communication

As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

Health and Wellbeing

The University of Guelph provides a wide range of health and wellbeing services at the Vaccarino Centre for Student Wellness (<https://wellness.uoguelph.ca/>). If you are concerned about your mental health and not sure where to start, connect with a Student Wellness Navigator (<https://wellness.uoguelph.ca/navigators>) who can help develop a plan to manage and support your mental health or check out our mental wellbeing resources (<https://wellness.uoguelph.ca/shine-this-year>). The Student Wellness team are here to help and welcome the opportunity to connect with you.

Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).



Recording of Materials

Presentations that are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources

The Academic Calendars (<http://www.uoguelph.ca/registrar/calendars/?index>) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the Undergraduate Calendar for information on regulations and procedures for Academic Consideration. (<https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-consideration-appeals-petitions/>)