



IES*1010 - Introduction to Indigenous 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

This course will provide students from diverse backgrounds with a robust conceptual framework to understand and participate effectively and respectfully in the study and practice of environmental science and practice grounded in Indigenous knowledge, perspectives, values and aspirations.

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

Department(s): School of Environmental Sciences

Course Description

Students will explore and discuss the cultural, historical, scientific, and ecological context of Indigenous environmental science (IES) and practice. They will be guided and encouraged in the development of their own personal framework for understanding and participating in IES. Students will begin to examine their own positions in Indigenous spaces and develop approaches for respectful and meaningful practice. The course incorporates lectures, sharing circles, guest lectures, and field trip(s). Emphasis will be placed on skills development, including critical thinking, writing, and oral presentations.

Lecture Schedule

Mon 11:30am-2:20pm in ANNU*306 (9/10 to 12/22)

Instructor Information

Susan Chiblow

Email: schiblow@uoguelph.ca

Textbooks

Group	Title	Author	ISBN
Required	Native science: natural laws of interdependence	Cajete, G	
Required	Traditional Ecological Knowledge: Learning from Indigenous practices for environmental sustainability	Nelson, M.K. & Shilling, D.	
Required	The Service Berry: Abundance and Reciprocity in the Natural World	Kimmerer, R.W	

Learning Resources

The Mounties: 150 years of Conflict

<https://www.aptnnews.ca/national-news/150-years-conflict-rcmp/>

Indigenous Peoples: Environment and Climate Justice – Several Podcasts

<https://www.yorku.ca/research/project/iej/iej-guest-podcasts/>

<https://www.yorku.ca/research/project/iej/podcasts/>

Craft, A. (2018). Navigating our ongoing sacred legal relationship with Nibi (water). In UNDRIP Implementation More Reflections on the Braiding of International, Domestic and Indigenous Laws: Special Report (pp.53-61). Centre for International Governance Innovation and Wiyasiwewin Mikiwahp Native Centre Law Centre.

1491: the Untold story of the Americas Before Columbus

<https://www.knowledge.ca/program/6474fc2c-8835-4810-9d98-43123f647830>

Minobimaatisiwin: the good life - Winona LaDule

<https://www.youtube.com/watch?v=pPJ3nrsCcrE>

Hoffman KM, Christianson AC, Dickson-Hoyle S, Copes-Gerbitz K, Nikolakis W, Diabo DA, McLeod R, Michell HJ, Mamun AA, Zahara A, Mauro N, Gilchrist J, Ross RM, and Daniels LD. 2022. The right to burn: barriers and opportunities for Indigenous-led fire stewardship in Canada. FACETS 7: 464–481. doi:10.1139/facets-2021-0062

McGregor, D. (2015). Indigenous women, water justice and zaagidowin (love). *Canadian Woman Studies/les cahiers de la femme*

Chiblow, s. 2024. Anishinaabek responsibilities and relationships are demonstrated in N'bi (Water) Declarations. *Wires (Water)* 12(1). DOI: 10.1002/wat2.1754

State of the World's Indigenous Peoples: Rights to lands, territories and resources. <https://www.un.org/en/desa/state-world%E2%80%99s-indigenous-peoples>

Indigenous knowledge is crucial in the fight against climate change - here's why. <https://climatepromise.undp.org/news-and-stories/indigenous-knowledge-crucial-fight-against-climate-change-heres-why>

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
Native Science: natural laws of interdependence	Required	\$28.90
Traditional Ecological Knowledge: learning from Indigenous Practices for Environmental Sustainability	Required	\$31.90
The Serviceberry: Abundance and Reciprocity in the Natural World	Required	\$15.99

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

Library Course Reserve (Ares)

For this course, you will be required to access course reserve materials through the University of Guelph McLaughlin Library. To access these items, select **Ares** on the navbar in CourseLink. Note that you will need your Central Login ID and password in order to access items on reserve. For further instructions on accessing reserve resources, visit [How to Get Course Reserve Materials \(https://www.lib.uoguelph.ca/find/course-reserves-ares/\)](https://www.lib.uoguelph.ca/find/course-reserves-ares/).

If at any point during the course you have difficulty accessing reserve materials, please contact the e-Learning Operations and Reserve Services staff at:

Tel: 519-824-4120 ext. 53621 | Email: libres2@uoguelph.ca | Location: McLaughlin Library, First Floor, University of Guelph

Course Learning Outcomes

1. Have a basic understanding of the history of Indigenous Peoples.
2. Describe the historical and cultural context of Indigenous environmental science and practice in Canada, with reference to reconciliation.
3. Examine the nature and roles of decolonization and Indigenization in approaching and addressing environmental issues.
4. Identify basic principles and components of Indigenous environmental science and practice including roles of land-based teachings and Indigenous knowledge holders.
5. Discuss the core characteristics of Indigenous knowledge systems and explain their impact on environmental decision-making.
6. Discuss the roles and activities of Indigenous environmental science practitioners including their objectives, motivations, skill sets and knowledge sets.
7. Demonstrate competency in working in a team setting towards a common goal.
8. Reflect critically on your personal understanding of and relationship to Indigenous environmental science and practice.
9. Plan career opportunities and set personal development goals related to your professional role in Indigenous environmental science.
10. Articulate your current perspectives in the context of Indigenous environmental science.

Schedule of Topics and Assignments

Day	Date:	Topic	Activities	Due
Mon	9/14	Introduction	Lecture 1: who I am Circle; introduction to syllabus; field trips; introduction to key words.	
Mon	9/21	History of Indigenous Peoples	Lecture 2: key words, phrases, definitions;	
Mon	9/28	Water Field Trip	Field Trip - dress for the weather	
Mon	10/5	No Class		
Mon	10/12	Thanksgiving Holiday		
Mon	10/19	No Class		
Mon	10/26	History of Indigenous Peoples; Indigenous Peoples Knowledge systems	Lecture 3. Introduction to IP and their knowledge systems	
Mon	11/2	Field Trip: Crawford Lakes	History of Indigenous Peoples	
Mon	11/9	Characteristics of IKS; Kinship; Environmental decision-making	Lecture 4.	



Mon	11/16	Relationality	Lecture 5.
Mon	11/23	Presentations	Student Presentations
Mon	11/30	Everything is Connected	Lecture 6: last class with a feast
Mon	12/7	No Class	
Mon	12/14	No Class	
Mon	12/21	No Class	

Assessment Breakdown

Description	Weighting (%)	Due Date
Assignment #1 Learning to Listen 1	10%	September 18
Assignment #2 Event Summary	10%	October 2
Assignment #3 Event Summary	10%	October 17
Assignment #4 Indigenous knowledge	10%	October 29
Assignment #5 Event Summary	10%	November 10
Assignment #6 Project Presentation	24%	Nov 16
Assignment #7 Book Reflection	10%	Nov 27
Assignment #8 Learning to Listen Final	15%	December 7

Grading Schemes

Grading Rubric for assignments will be discussed in class and posted in courselink.

Learning to Listen, Event Summaries, and Book Reflection are one page double spaced.

Project presentations is the highest percent of your grade and will be based on a Rubric to be discussed in class and posted to courselink.

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

Assignments are submitted in drop boxes on CourseLink.

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

Please reach out to me if you cannot attend a class as class attendance is mandatory.

Course Technology Requirements

Some classes may be taught in Zoom.

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/>)