



GEOG/ERS 460
Sustainable Food: Regional Case Study (Waterloo Region)

Department of Geography & Environmental Management
Faculty of Environment
Fall 2021

Course instructor: Dr Steffanie Scott
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Class time: T/Th 9:30-10:50am ET
Office hours: after class or by appointment

Note: *Refer to the course website regularly for updates.*

With gratitude, we acknowledge that we are on the traditional territory of the Attawandaron (Neutral), Anishnaabeg, and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, 950,000 acres of land on either side of the Grand River that was granted to the Six Nations in a 1784 treaty. Today, Six Nations' territory consists of 48,000 acres of land. See [here](#) for more information.

The [Waterloo Indigenous Student Centre](#) facilitates the sharing of Indigenous knowledge and provides culturally relevant information and support services for all members of the University of Waterloo community, including Indigenous and non-Indigenous students, staff, and faculty.

Course description

Industrial agriculture has destabilized the Earth's ecosystems at the planetary scale. Ecological as well as socio-cultural, economic, and political factors shape the sustainability and resilience of our food system. This seminar course takes a regional focus to ground our discussions of pertinent concepts, challenges, and opportunities. The course examines regional issues and initiatives linked to food security, food sovereignty, resilient agriculture and agro-ecology, the energy-water-food nexus, food policy, food supply chains, urban food systems, alternative food initiatives, sustainable diets, and food waste reduction—all within the context of the case study region.

Detailed description

In this course, we draw on environmental, economic, socio-cultural, health, and political perspectives to examine the challenges and strengths of the food system in Waterloo Region. The Region of Waterloo is the 10th largest urban area in Canada and is the fastest-growing urban area in Canada. In this course, we explore the history and geography of food provisioning in this region. We review threats to farmland

loss, soil fertility, and clean water, and ways to decolonize our food system. The bulk of the course then focuses on alternatives: what initiatives are underway to strengthen regenerative agriculture, food justice and sovereignty? Who are the key players? We review 'grassroots', private sector, and state policy initiatives to promote a 'sustainable' food system in urban and rural areas of the region, and assess their relative successes and challenges, and their wider significance.

Intended learning outcomes

By the end of the course, student should have acquired the following:

- An appreciation of the legacy of colonialism on Indigenous foodways and on our ecosystem and system of food production
- Ability to articulate your own perspective on the possibilities for decolonizing the food system in Waterloo Region
- Knowledge of the historical development and contemporary condition of the case study region's food system, its resources, demographic and economic shifts, governance approaches, and key challenges and opportunities
- An understanding of contemporary principles and approaches to sustainable food systems, and how they apply to the case study region
- Improved skills in systems thinking, critical reflection, practical application, multi-context communication, teamwork, collective action, and advocacy

The format for the 80-minute classes will be a combination of seminar discussions, guest speakers, and student presentations.

Guest speakers will loosely address the questions, what do you see as the key issues to be addressed in our (Waterloo region) food system; how does your past or current work address them?

Synchronous (live) class sessions will be delivered in this course through a video conferencing platform supported by the university: Zoom. You are expected to attend most of these synchronous classes.

Please speak to the instructor if you have a time conflict.

Course content

Week 1 (Sept 9) Overview and introductions

Discussion: What activities have you found most engaging and meaningful in your university education? How could we incorporate some of these ideas into this course? How can we tap into and build on your past experiences and knowledge base in this course?

See [this site](#) which includes a long series of reports about Waterloo Region's food system from both WR Public Health and from past UW students.

Also, [this set of resources](#) on food access in WR was prepared last year. I hope that this class can help to further build up content for this [Our Food Future—Waterloo Region](#) website/knowledge hub.

Finally, [here's](#) a podcast with Lil Milagro Henriquez-Cornejo of [Mycelium Youth Network](#) that you might find inspiring, on youth engagement and climate resilience. I encourage you to listen and make note of (1) what resonates with you; (2) what does it make you curious to know more about; (3) what do you disagree with or what would you question from what you heard?

Week 2 (Sept 15 & 11) Visioning this course

Come to class on Tues ready to share some ideas on what the [Our Food Futures--Waterloo Region](#) website could become, and for whom (with the injection of energy and contributions from this class).

Take a look at this [Earth to Tables Legacies](#) site. Explore at least two different videos or photo essays, and reflect on the guiding questions associated with each.

Week 3 (Sept 21 & 23) From cultural genocide and ecocide to food sovereignty

[Food Sovereignty for First Nations, Métis, & Inuit Peoples on Turtle Island](#) (video/webinar with Dave Skene and Garrison McCleary). Listen for what is happening in Waterloo region.

[Indigenous Food Sovereignty Collective Waterloo Region](#). (Check out this website, & optionally also this site: [The Indigenous Food Circle](#) in northeastern Ontario)

National Film Board & Gary Farmer (director). 1998. [The Gift](#). (video, 0:48:00).

This documentary examines the role of corn in the lives of Indigenous peoples in the Americas. Before colonization, corn was widely used as a beverage, a food staple, an oil, and a ceremonial object. It was respected and revered as a critical part of creation. This film explores the powerful bond and spiritual relationship that continues to exist between people and corn. Combining interviews, dance, and song, The Gift captures the traditional, spiritual, economic, and political importance of this sacred plant.

--Based on the above three sources, prepare a (written or artistic) reflection on what you learned about our local / regional food system, its significance, what surprised you, and what questions this raised for you.

This week we will also determine groups & topics for term projects.

Week 4 (Sept 28 & 30) Justice, equity, and labour in WR's food service industry

Guest speaker: Tyzun James (owner, Cafe Pyrus)

You are asked to review one of the student research reports and one of the Waterloo Region Public Health reports from the [Our Food Futures—Waterloo Region website \(knowledge hub\)](#) - under 'Resources - Reports'. Sign up on our shared googledoc to indicate which reports you have selected so that we do not duplicate our efforts.

Guiding questions to consider in your reflection: *what significant information does each report provide for our learning in this course? What did you learn? What surprised you? How might some of our term projects make use of or build on this information? What are some of the limitations of the reports (e.g., what content or whose perspectives might have been overlooked)?*

Sept 30: With your group members confirmed, each group will informally explain for a few minutes about their project ideas. We can have a short discussion to help you prepare for your written project proposal.

Week 5 (Oct 5 & 7) Food access, justice and the food charity system in Waterloo region

Guest speaker: Siobhan Bonisteel (formerly with the Cambridge Self-help Food Bank)

Desjardins, E. and Azevedo, E. 2013. "Making Something out of Nothing": Food Literacy among Youth, Young pregnant women and young parents who are at Risk for Poor Health. A Locally Driven Collaborative Project of Public Health Ontario.

Rodriguez, P.I., Dean, J., Kirkpatrick, S., Berbary, L. and Scott, S., 2016. Exploring experiences of the food environment among immigrants living in the Region of Waterloo, Ontario. *Canadian Journal of Public Health*, 107(1), pp.eS53-eS59.

→ **Fri, Oct 8:** Submit term project proposal & group contract

→ Complete your research ethics **TCPS tutorial** soon; submit certificate of completion to Steffanie

Reading Week (Oct 12 & 14) – no classes

Optional/recommended listening/viewing materials:

Canadian Bushcraft Podcast, with Caleb Musgrave. 2020, Sept 6. Indigenous Food Systems: Fall (Episode 24, 1:05:00).

WRDSB. 2021. Sugarbush Live. (video, 56:00) with Garrison McCleary, Dave Skene, and others.

Andrew Judge on Indigenous Knowledge for a Changing Climate. 2021, Apr 5 (video, starts at 0:14:00 to 1:03:00).

Week 6 (Oct 19 & 21) Urban food system change and circular food economies

Guest speaker: Kathleen Barsoum (Coordinator, Waste Management, Region of Waterloo)

Sustainable Waterloo Region. 2021, June 7. Serving up Sustainability: Food Systems and Climate Change (video). See section with Chef Thompson Tran (of The Wooden Boat Food Company) and Court Desautels (of The Neighbourhood Group & Borealis restaurant) (the last two speakers in this panel).

Wegener, J., Hanning, R.M. and Raine, K.D., 2012. Generating change: multisectoral perspectives of key facilitators and barriers to food system policy making. *Journal of Hunger & Environmental Nutrition*, 7(2-3), pp.137-148.

Week 7 (Oct 26 & 28) Local food, seeds, and agrobiodiversity

Guest speaker: Bob Wildfong (Seeds of Diversity)

Macrae, Rod. 2015. Dollars & Sense: Opportunities to Strengthen Southern Ontario's Food System. Metcalf Foundation and McConnell Foundation.

This report looks at opportunities to grow Ontario's \$63 billion food system. It also assesses how increasing regional food production and distribution affects the larger food system, including businesses that supply farmers, food processors, and distributors, as well as food retailers and food service operators. Key findings include:

- More than half of southern Ontario's imported food products could be produced within the province.
- If local production expanded to replace 10% of the top 10 fruit and vegetable imports, the Ontario economy would gain close to a quarter of a billion dollars in GDP and 3,400 full-time jobs.
- When Ontarians adopt a healthier diet, there is higher consumer demand for fruits, vegetables, and some grains. For example, if consumers moved to an ideal level of oat consumption in their diets, 241 jobs would be created and the province's GDP would grow by more than \$14.2 million.

The report makes the case for investing in the development of regional food systems and providing the supportive regulatory environment, infrastructure, and distribution networks required for these systems to flourish.

Week 8 (Nov 2 & 4) Shifting diets, food system advocacy and stakeholder engagement in Waterloo Region

Guest speaker: Katherine Pigott (former manager, Waterloo Region Public Health)

Veeramani, A., Dias, G.M. and Kirkpatrick, S.I., 2017. Carbon footprint of dietary patterns in Ontario, Canada: A case study based on actual food consumption. *Journal of Cleaner Production*, 162, pp.1398-1406.

Desjardins, E., Lubczynski, J., & Xuereb, M. (2011). Incorporating policies for a healthy food system into land use planning: The case of Waterloo Region, Canada. *Journal of Agriculture, Food Systems, and Community Development*, 2(1), 127-139.

Food System Roundtable of Waterloo Region. (2013). Waterloo Region Food Charter.

Week 9 (Nov 9 & 11) Faith, community building, and regenerative agriculture

Guest speakers: Angie Koch (Fertile Ground CSA) & Adam Kramer (La Hacienda Sierra CSA)

Laforge, J.M., Dale, B., Levkoe, C.Z. and Ahmed, F., 2021. The future of agroecology in Canada: Embracing the politics of food sovereignty. *Journal of Rural Studies*, 81, pp.194-202

Sarah Martin-Mills (Growing Hope Farm), Angie Koch (Fertile Ground CSA), Mark Reusser (Poultry farmer in New Dundee; & President, Waterloo Federation of Agriculture), Lloyd Frey, and Chris Mullet Koop. 2020, Feb 5. [Farmers Breakfast Panel: Discussion with Ontario Mennonite in Agriculture](#). (video, 1:25:00)

Week 10 (Nov 16 & 18) From ecological crisis to land restoration

Guest speaker: [Wolfgang Pfenning](#) (Pfenning's Organic Vegetable Farm and wholesale business)

Isaac, M. et al. 2019. [Agroecology in Canada: Towards an Integration of Agroecological Practice, Movement, and Science](#). *Sustainability*, 10(9).

[Nicola Thomas on Urban ecological wellness: Landscapes mitigating climate change](#). 2021, Apr 5 (video, from 1:04:00 to 1:25:00)

Week 11 (Nov 23 & 25) Cultural diversity and food justice

Guest speaker: [Vanessa Ong](#) (co-founder, [Littlefoot Community Projects](#) & MES in Planning at UW)

[Waterloo Region Food Justice Food Strategy: Applying an Indigenous Equity and Anti-Racism Lens](#) (drafted by Erica Calder, March 2021)

Erica Calder presents this strategy in the webinar, Sustainable Waterloo Region. 2021, June 7. [Serving up Sustainability: Food Systems and Climate Change](#) (video, from 0:26:00 to 0:42:00).

Ong, V., Skinner, K. and Minaker, L.M., 2021. [Life stories of food agency, health, and resilience in a rapidly gentrifying urban centre: Building a multidimensional concept of food access](#). *Social Science & Medicine*.

Michel Desjardins and Ellen Desjardins. 2009. [Food that Builds Community: The Sikh Langar in Canada](#). *Cuisine*, 1(2).

--Prepare your Reflection this week on the above pieces in combination with some of your own research about food equity and food justice events/services/initiatives in relation to non-European-background communities/organizations/restaurants in Waterloo Region. [*can anyone share tips on where to start?*]

Optional:

Ong, Vanessa. 2021. [Food as Home](#) blog.

Guthman, J. (2008). Bringing good food to others: investigating the subjects of alternative food practice. *Cultural Geographies*, 15(4), 431-447.

Slocum, R. (2007). Whiteness, space and alternative food practice. *Geoforum*, 38, 520-533.

Soul Fire Farm: Ask A Sista Farmer series.

Week 12 (Nov 30 & Dec 2). Land, Water, Food Systems, and the Future (& Student Presentations)

TBC: Jodi Koberinski and Nikola Barsoum

Rotz, S., 2017. 'They took our beads, it was a fair trade, get over it': Settler colonial logics, racial hierarchies and material dominance in Canadian agriculture. *Geoforum*, 82, pp.158-169.

WaterlooArchitecture. 2020, Sept 24. Land back. (video, 1:28:00, with Amy Smoke, Eladia Smoke, Phil Monture) Arriscraft Lecture Series, What is Solidarity?

Optional:

Andrew Judge on Indigenous Knowledge for a Changing Climate. 2021, Apr 5 (video, starts at 0:14:00 to 1:03:00).

Week 13 (Dec 7) Student Presentations

Optional additional weekly **reflection** this week, on the course and on your learning: in what way did we build community in this course? In what way did you contribute to this? in what way could our work collectively and your own contributions to this have been strengthened? How might your term project have impact? Why might it have less impact than anticipated?

Any optional short assignment is due **Dec 10**

Assessment & Specifications Grading

This course uses a relatively new grading method called "specifications grading" (similar to "contract grading"). Basically, you decide what grade you want to achieve in the course and you complete a "pathway" of assessments (e.g., weekly responses, assignments, tests) to achieve that grade. Your grade is based on the number and level of difficulty of assessment that you complete. For more information on specifications grading, you can read the article [Yes, Virginia, There's a Better Way to Grade](#), or you can read the [book](#) by Linda B. Nilson.

The rationale for specifications grading is five-fold:

1. It better links assessment with learning outcomes. Your final grade has more meaning because it is not simply an average of things you did well or not, but rather reflects the number and level of learning objectives/outcomes achieved for the course.
2. It increases students' agency in determining their grades through the creation of clear pathways. This reduces students' stress and anxiety over grades, increases motivation, and orients students' attention toward learning rather than performance.

3. Clear criteria (specifications) for different grades reduces the stress and anxiety of instructors by reducing the amount of "negotiation" and "hairsplitting" with students over marks.
4. Instructors allocate more time towards formative (on-going, constructive) feedback, focusing more on improving student learning rather than summative assessment.
5. Re-submission opportunities encourages risk-taking, creativity, and "outside the box" thinking.

Specifications grading is typically preferred by students over the traditional grading systems due to these factors:

- it motivates students to work harder,
- there is more student choice and control,
- it reduces stress,
- students feel more responsible for their own grades,
- it feels more like coaching, and
- it fosters higher order and creative thinking.

All assessments are graded on the basis of credit/non-credit (i.e., pass/fail). Importantly, a **"credit" for an assessment is not simply a 50%**. With specifications grading, a credit means that you are competent in the learning objective/outcome (or "competency") being assessed. This is a much higher bar - you can think of it as the top one or two tiers of a traditional grading rubric, equivalent to a B or even a low A. Since your assessments more closely align with specific learning outcomes/objectives, achieving one outcome/objective exceptionally well does not "balance" or "offset" with doing very poorly for another outcome (as is the case with traditional grading schemes). In the specifications grading model, you are given a grade according to learning activities for which you demonstrate competency. Earning a high mark in this course means that you demonstrated competency across multiple learning outcomes and objectives.

Summary of assessment

| Grade pathway | D (55%) | C (65%) | B (75%) | A (85%) |
|---|---------|---------|---------|---------|
| Term project (proposal, draft project, 1 peer review, & final project) | 1 | 1 | 1 | 1 |
| Weekly reflections (up to 11) [bonus: 2% for each additional] | 5 | 6 | 7 | 8 |
| Responses (to reflections) (up to 10) [bonus: 1% for each additional] | 0 | 2 | 4 | 5 |
| Class participation (more than just attendance) | -- | Credit | Credit | Credit |

| | | | | |
|---|---|---|---|---|
| Optional/bonus short assignments or lead class activity one week [bonus: 4% for each] | 0 | 0 | 0 | 0 |
|---|---|---|---|---|

See guidelines below or on Learn for each activity.

Re-submissions

Weekly Reflections and Responses: If expectations (outlined in the rubric on Learn) are not met, each student will have a total of **three "free" chances to resubmit** any of their weekly reflections or responses (within 3 business days of receiving your grade). After that the work will not be credited.

Term project: If any parts of your term project submissions do not receive a "credit" the first time, you will be given **one chance** (for each part) to resubmit without penalty. Your re-submission is due within 3 business days of receiving your grade. If you fail to "pass" again then you will have to redo that part a third time with a **penalty of 5% taken from your overall final course grade**. A fourth re-submission would result in a **10% deduction from your overall final grade** and so on.

Late penalties: You can also use the above resubmission opportunities as a 3-day extension of the due date if you cannot complete your work on time. You can submit it up to three days late and it will count as one of your re-submission opportunities. Once your resubmission opportunities are used up, each 24-hour period beyond the due date that you submit a piece of work will result in a **1% reduction in your overall grade**.

Bonus points can be earned over and above the number grades listed above based on completion of additional work (as outlined in the table). Exceptional writing/expression and analysis (1-2 points) may also be added at the discretion of the instructor.

Weekly reflections

Due Monday evenings of the week in which they will be discussed. These weekly reflections will be reviewed and used as a basis for class discussion every Thursday.

Length and format: I suggest a 300-450 word response, but this is flexible. If you prefer, you may prepare or a short video or audio piece, or some other kind of artistic creation... You might build on a poignant quote.

Rubric for weekly reflections

| Credit/competent | Re-submit |
|--|--|
| Demonstrates an understanding of the key ideas of the assigned materials, and their significance for the WR food system Thoughtful reflection, extends discussion in new ways | Response is somewhat superficial or vague, demonstrating some understanding of the assigned materials, but does not add much to the discussion or highlight the relevance Does not make reference to all assigned materials, or does not provide a reference list |

| | |
|--|--|
| Makes reference to all assigned materials and provides a reference list at the end | |
|--|--|

Responses (to two of your peers' weekly reflections)

Due Friday evening of the week in which the reflections were due. To receive one credit for this activity, prepare a response to the reflections of at least *two* of your classmates in a given week (these can be submitted as replies to their original posts). Suggested length: 100+ words each.

As for content, aim to open up a conversation. Consider the following:

- How did what your peers wrote (or otherwise presented) change, deepen, or grow your perspective and understanding of the assigned material?
- How did it challenge you, or what did it trigger in you?

General guidelines for online discussion (on Zoom) as well as these responses on Learn

- Be respectful: take care of our own and each other's needs
- Speak from the "I"; define the "we" (if you use it)
- What is said here, stays here; what is learned, leaves
- Respect & acknowledge the diversity of worldviews, experiences, backgrounds, and preferences that we all bring to the table
- "Yes, and..."
- Foster an interruption-free zone
- Make space, take space: be mindful of how much space you take up
- Don't assume folks' pronouns
- Take time/space for yourself if you want or need it

Optional short assignment

Optional (for bonus points). Due **Dec 10.**

Lead class activity one week

Optional (for bonus points). See Steffanie to discuss at least two weeks in advance.

Peer review (of term projects)

This is part of creating a culture of learning and constructive feedback within our class group. Details to be posted on Learn. Everyone is expected to provide feedback on one term project of your classmates. Guidelines to be provided.

A decent draft of each term project is due (for peer review) on **Nov 19.**

Peer reviews are due on **Nov 26.**

Term project

Due on **Dec 7**. See project guidelines and list of proposed topics on Learn. You can choose a topic related to course themes, subject to approval by the instructor.

Consent to publish student work: Students' term projects from this course are anticipated to be of value to future students, community members and academic researchers. Because of this, a selection of student products will be made publicly available. The instructor requests that you allow your work products to be included in such a package. However, should you choose not to have your work published or have it published anonymously you may choose to do so without prejudice or course penalty. *By submitting a term project for this course, it is assumed that you are providing your permission for this work to be shared online on the Our Food Futures and/or Food Systems Roundtable of Waterloo Region website. If you do not wish this to happen, please notify the instructor by email.*

Research ethics: All term projects that involve human subjects (e.g., interviews, focus groups, surveys, participant observation) require research ethics approval.

Ethics approval has already been granted to the course instructor on behalf of this class. According to UW Research Ethics guidelines at this time, *we will only have permission for online interviews, not in-person.*

Students who intend to conduct interviews (or other forms of research with human subjects) must complete the **online TCPS tutorial** and provide a copy of their certificate of completion to the course instructor.

The required **templates** of introduction letters and consent forms that must be used for such research are provided on Learn.

Submission of assignments

Use single or 1.5 spacing. For citing references in your assignments, use **APA or Harvard style** or another standard format.

By submitting an assignment for this course, you are agreeing to the following:

- You have properly referenced all ideas, words or other intellectual property from other sources used in the completion of this assignment.
- You have included a proper reference list, which includes acknowledgement of all sources used to complete this assignment.
- The assignment was completed by your own efforts. You did not collaborate with any other person for ideas or answers (with the exception of group projects).
- This is the first time you have submitted this work (either partially or entirely) for academic evaluation.

When You Cannot Meet a Course Requirement Due to Illness or Other Reasons: There will be no unpenalized extensions on assignments except for illness, severe personal extenuating circumstances, or weather emergencies. When you find yourself unable to meet a course requirement because of medical, compassionate or other reasons, please advise me in writing by Learn email; make sure to include your

full name in your message. Where possible, you must contact the instructor in advance of the assignment due date, but otherwise as soon as possible after the due date. As a rule, you must provide appropriate documentation, for example, a note from your doctor indicating the dates during which you were ill, and describing the severity of your illness. *Manage your time carefully. Pressure of work alone is not an acceptable reason for seeking an extension without penalty.*

Waterloo Learn (course website): Waterloo Learn is a web-based course management system that enables instructors to manage course materials (posting of lecture notes etc.), interact with their students, drop boxes for submissions, discussion boards, course e-mail, etc.), and provide feedback (grades, comments, etc.).

Logging Into Waterloo Learn: Users can login to Learn via: <http://learn.uwaterloo.ca/>. Use your WatIAM/Quest username and password. If you still cannot get on after checking your password, please confirm with your instructor that you are on the class roster.

UW Writing and Communication Centre

The Writing and Communication Centre (WCC) works with students as they develop their ideas, draft, and revise. Writing and communication specialists offer one-on-one support in planning assignments, synthesizing and citing research, organizing papers and reports, designing presentations and e-portfolios, and revising for clarity and coherence.

To book an appointment, visit uwaterloo.ca/wcc. Group appointments for team-based projects, presentations, and papers are also available.

Strongly recommended sources on writing skills

For a fourth-year social science course, you are expected to have a high level of writing competency. To further hone your skills, consider reviewing the sources below:

Writing Effective Essays and Reports, by Rob de Loe (free online resource):

http://www.environment.uwaterloo.ca/u/rdeloe/writing_booklet/

Style: Lessons in Clarity and Grace by Joseph Williams (free PDF online, or in the library).

Email

Check the 'Announcements' tool in Learn for updates regarding the course. Subscribe to receive email notifications.

Please direct course-related questions to me through Learn. **Put GEOG (or ERS) 460 in the subject line** of your email. Remind me after three days if I haven't replied, in case your message got overlooked.

Note that email is the official channel of communication between the University and its students. You are required to check your *uwaterloo.ca* email account regularly. If you use another email service (e.g., gmail), it is your responsibility to ensure that mail sent to your *uwaterloo.ca* account is forwarded to your other account.

University policies

Intellectual Property:

Students should be aware that this course contains the intellectual property of their instructors and/or the University of Waterloo. Intellectual property includes items such as:

- Lecture content, spoken and written (and any audio/video recording thereof);
- Lecture handouts, presentations, and other materials prepared for the course (e.g., PowerPoint slides);
- Questions or solution sets from various types of assessments (e.g., assignments, quizzes, tests, final exams); and
- Work protected by copyright (e.g., any work authored by the instructor or TA or used by the instructor or TA with permission of the copyright owner).

Course materials, and the intellectual property contained therein, are used to enhance a student's educational experience. However, sharing this intellectual property without the intellectual property owner's permission is a violation of intellectual property rights. For this reason, it is necessary to ask the instructor, TA and/or the University of Waterloo for permission before uploading and sharing the intellectual property of others online (e.g., to an online repository).

Permission from an instructor, TA or the University is also necessary before sharing the intellectual property of others from completed courses with students taking the same/similar courses in subsequent terms/years. In many cases, instructors might be happy to allow distribution of certain materials. However, doing so without expressed permission is considered a violation of intellectual property rights.

Please alert the instructor if you become aware of intellectual property belonging to others (past or present) circulating, either through the student body or online. The intellectual property rights owner deserves to know (and may have already given their consent).

Academic Integrity:

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. The University's guiding principles on academic integrity can be found here: <http://uwaterloo.ca/academicintegrity>. ENV students are strongly encouraged to review the material provided by the university's Academic Integrity office specifically for students: <http://uwaterloo.ca/academicintegrity/Students/index.html>

Students are also expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for their actions. Students who are unsure whether an action constitutes an offense, or who need help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. Students may also complete the following tutorial: <https://uwaterloo.ca/library/get-assignment-and-research-help/academic-integrity/academic-integrity-tutorial>

When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline: <https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-71>. Students who believe that they have been wrongfully or unjustly

penalized have the right to grieve; refer to Policy #70, Student Grievance:

<https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-70>

Note for students with disabilities: [AccessAbility Services](#), located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with [AccessAbility Services](#) at the beginning of each academic term.

Mental Health: The University of Waterloo, the Faculty of Environment and our Departments/Schools consider students' well-being to be extremely important. We recognize that throughout the term students may face health challenges - physical and / or emotional. **Please note that help is available.** Mental health is a serious issue for everyone and can affect your ability to do your best work. Counselling Services <http://www.uwaterloo.ca/counselling-services> is an inclusive, non-judgmental, and confidential space for anyone to seek support. They offer confidential counselling for a variety of areas including anxiety, stress management, depression, grief, substance use, sexuality, relationship issues, and much more.

Religious Observances: Students need to inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See Policy 70 - Student Petitions and Grievances, Section 4, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt please contact your Undergraduate Advisor for details.

Appeals: A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 – (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) www.adm.uwaterloo.ca/infosec/Policies/policy72.htm

Turnitin: Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, and are subject to the USA PATRIOT ACT, 2001; therefore, students must be given an alternative (e.g., scaffolded assignment or annotated bibliography) if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin® in this course.