

School of Environment, Resources and Sustainability  
Faculty of Environment  
University of Waterloo

## ERS 100

### Foundations: Environment, Resources and Sustainability (FALL 2021)

**Instructor:**

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**Lectures:** Online posted to LEARN weekly

**Tutorials:** TBD

**Office Hours\*:** TBD – there will be on-campus office hours but as COVID restrictions are evolving, office hours will be updated to LEARN.

*\*Please email prior to attending office hours. This is important in controlling the flow and number of students due to COVID safety restrictions. You will be required to wear a mask and wait outside the Instructor's office. Due to COVID restrictions, most questions can and should be answered via email, or during your tutorial section. Please limit in-person office visits to those questions requiring more involved discussion with the Instructor.*

**TAs:**

See LEARN

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**Land Acknowledgement:**

The Waterloo, Kitchener, and Cambridge campuses of the University of Waterloo are situated on the Haldimand Tract, land that was granted to the Haudenosaunee of the Six Nations of the Grand River, and are within the territory of the Neutral, Anishinaabe, and Haudenosaunee peoples.

The Stratford campus is on the territory of the Anishinaabe, Haudenosaunee, and Ojibway/Chippewa peoples. This territory is covered by the Upper Canada Treaties.

**Description:**

This course provides foundations for studying in the School of Environment, Resources and Sustainability. The course emphasizes the need to understand how we can use social, natural and physical sciences to understand and solve environmental and resource problems in sustainable ways. The course also considers the limitations of approaches that perceive and attempt to manage issues as isolated phenomena. We will learn how to recognize the broader context around environment and resource issues and examine the roots of our problems within and ecological, political, social, and economic systems.

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<sup>1</sup> When communicating via email, please identify the course (e.g. "ERS 100") in the subject line. Make sure to use your UW account.

**Intended Learning Outcomes:**

Upon completion of the course requirements, you should be able to:

- Define foundational concepts for studying in SERS, including systems and sustainability
- Identify links between the social and ecological aspects of environmental problems, locally and globally
- Evaluate sources of information, including mainstream media sources and peer reviewed journals, to develop information literacy and critical thinking skills
- Identify the strengths of different kinds of data collection and analytical approaches for environmental problem-solving
- Examine and evaluate research about complex environmental problems

**Approach:**

As we continue to deal with the impacts of COVID 19, this term we will see a more hybrid approach to learning – not fully online, but not fully on campus. That means for ERS 100, you will have your lectures (I am referring to them as modules) asynchronously online. With asynchronous learning, the professor and students use a virtual online class space to share information. We are lucky this term because there will be on campus tutorials (assuming the COVID landscape allows). That means, you get to see and interact with your peers, TAs and your professor. There is one virtual tutorial section for those students who are not able to attend campus – however, you do need to register for that tutorial section. To make things as fun and interactive as possible, we will be using Wakelet (for the first time). Each week, a link will be posted to the course's LEARN page that will take you to the Wakelet module/Wakelet activity. From there you will be able to work through the Module content and interactive activities. Weekly tutorials will focus more on hands-on experiential learning and make time to focus on your course assignments with opportunities to discuss aspects with your peers, TAs and Professor. Please come prepared to participate in your tutorials, read the course readings and participate in the modules – by doing this you will be able to get the most out of this course and will set you up for success during your time in SERS.

**Required Readings:**

Required readings will be posted to the course's LEARN site. Throughout the term some readings might be updated so ensure you check regularly. There is no textbook for this course and there will be relatively few readings (and more interactive content) compared to other courses. This is because I want to introduce you to key theories, case studies and concepts with the readings. We will then build upon them in our modules and tutorials through discussions and activities. It is important that you do the readings *prior* to each module and tutorial, in order to effectively utilize your time to develop your knowledge, and allow for better engagement with the material during our activities. All readings will be testable material.

**Communication with Instructors and TAs**

Students' UW email accounts will be used for all communication. Students are responsible for checking their UW email and LEARN accounts regularly. All course announcements will be posted to LEARN. An effort will be made by the TAs and the Professor to deal with email requests, within two business days of receipt (48 hours). The professor does not respond to emails outside of regular working hours (M-F ~8:30 AM- 5:00 PM) or during holidays. If you require a timelier response, post your question to the LEARN discussion board. The course's TAs will be monitoring the discussion board daily (except on evenings and weekends). Further, other students in the course might respond quicker. All emails and communications with the TAs and course instructor must be respectful and professional. Any unprofessional and disrespectful emails will be reported.

## **IMPORTANT: Alternative Arrangements Due to COVID**

In the event that the instructor or TA has to self-isolate due to COVID guidelines – modules/tutorials will ideally be covered by another TA or the instructor. This might be in person or a virtual module/tutorial depending on the situation. If any student at any time feels unwell or needs to self-isolate, there is an online streaming option for the tutorials on Wednesdays at 11:30 AM – 12:20 PM. Please email the instructor to discuss. You can safely stay home and not miss out on any course content.

## **Technical Support**

\*Please note it is your responsibility to ensure that your computer is up to date and compatible. If you are unable to access Waterloo LEARN or submit and assignment to a dropbox you must contact Technical Support at [learnhelp@uwaterloo.ca](mailto:learnhelp@uwaterloo.ca). **Include your full name, WatIAM user ID, student number, and the course name and number.** Technical support is available during regular business hours, Monday to Friday, 8:30 to 4:30 PM (Eastern Time). Further, trouble shooting for LEARN can be found here: <https://uwaterloo.ca/learn-help/students>. Often, if you log out of LEARN and exit your web browser and then log back in, you can access LEARN again. Since we are using Wakelet this term, there will be no University Technical support. If you are having issues with Wakelet, please send the Professor an email and the Waklet help team will assist.

*\*\*Ultimately, if LEARN access issues are not due to any University of Waterloo changes/updates, it is your responsibility to fix the problem, so please do not leave submissions until the last minute.*

## **Course and University Policies**

### ***Missed Assignments and Examinations/Tests:***

All exams are mandatory. If you miss a test/or assignment you must provide reasonable documentation (a university verification of illness form) explaining the reason for your absence, degree of incapacitation, dates covered by the note to be considered for an alternative arrangement. According to university policy, your VIF must be provided within 48hrs of the missed assignment due date or exam/test date. Please make a copy of this note and give the copy to your Professor by hand or scanned and sent by email (email to [cbarbeau@uwaterloo.ca](mailto:cbarbeau@uwaterloo.ca))

### ***Requests for Extensions: Deadlines and Make-Up Day***

With an understanding that life happens – there will be one day (Monday, November 29<sup>th</sup>, 2021 @ 11:55 PM EST) where you can hand in a course assignment (those assignments that have a due date prior to November 29<sup>th</sup>, 2021) with a 10% penalty (off the final grade for that missed assignment). You do not have to ask if you can submit. Submit to the original drop box on LEARN. There will be no exceptions or extensions given to this date. If you do not hand in an assignment after this date, you will receive a zero on the assignment. Remember that the end of term is often a hectic time with course work, so please plan to submit your work on the original due date and use this option only if necessary.

Note, that all dropboxes close at 11:55 PM EST and to be fair to all students, anything submitted after that time (according to the LEARN clock) will be considered late, even if it is only a minute (please be aware of time zones for everyone off campus).

If you are registered with Accessibility Services and require an accommodation (see below) you must contact them first, prior to the deadline and the Professor will work with your coordinator to accommodate your request. Simply missing a deadline or test, and stating that you are registered with accessibility services is not adequate.

### ***Note for Students with Disabilities:***

AccessAbility Services located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students without compromising the academic integrity of the curriculum. If you require academic accommodations, please register with accessibility services at the beginning of each academic term. If you are unable to meet course deadlines and are registered for accommodations with AccessAbility Services you must first contact your coordinator to arrange for an accommodation.

**Religious Observances:**

Student needs 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.

**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. See ([www.uwaterloo.ca/academicintegrity](http://www.uwaterloo.ca/academicintegrity)).

Students who are unsure what constitutes an academic offence are requested to visit the on-line tutorial at:

<http://www.lib.uwaterloo.ca/ait/>.

**Discipline:**

A student is expected to know what constitutes academic integrity, to avoid committing academic offence, and to take responsibility for their actions. A student who is unsure whether an action constitutes an offense, or who needs 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. For information on categories of offences and types of penalties, students should refer to Policy 71 - Student Discipline,

<http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm>. For typical penalties, check Guidelines for Assessment of Penalties, <http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm>

**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. Read Policy 70 - Student Petitions and Grievances, Section 4,

<http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm>. When in doubt please contact your Undergraduate Advisor for details.

**Appeals:**

A decision made under Policy 70 - Student Petitions and Grievances (other than regarding 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 defer to Policy 72 (Student Appeals) <http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm>

**Consequences of Academic Offences:**

Students are strongly encouraged to review the material provided by the university’s Academic Integrity office. See (<http://www.adm.uwaterloo.ca/infoacad/Students/index.html>) .

**University Policies: Plagiarism**

Please familiarize yourself with the University of Waterloo’s policy dealing with plagiarism. Be especially careful when using materials from the internet, and be aware that software available to instructors can be used to check student submissions for plagiarism (e.g. [www.Turnitin.com](http://www.turnitin.com)). Plagiarism offences are normally treated quite seriously by the University and can result in significant penalties being assessed (e.g. failing grade on an assignment, repeating a course, suspension or expulsion).

**Definition of Plagiarism:** “The act of presenting the ideas, words or other intellectual property of another as one’s own.” - Source: University of Waterloo, Policy 71.

**To Avoid Plagiarism**

The use of other people's work *must* be properly acknowledged and referenced in all written material such as take-home examinations, essays, research papers, laboratory reports, work-term reports, design projects, statistical data, computer programs and research results. The properly acknowledged use of sources is an accepted and important part of scholarship. Use of such material without complete and unambiguous acknowledgement, however, is an offence under Policy 71.

***Quoting, paraphrasing, and summarizing*** (source: <http://owl.english.purdue.edu/owl/resource/563/1/>)

These three ways of incorporating other writers' work into your own writing differ according to the closeness of your writing to the source writing.

- **Quotations** must be identical to the original, using a narrow segment of the source. They must match the source document word for word and must be attributed to the original author with page number.
- **Paraphrasing** involves putting a passage from source material into your own words. A paraphrase must also be attributed to the original source. Paraphrased material is usually shorter than the original passage, taking a somewhat broader segment of the source and condensing it slightly.
- **Summarizing** involves putting the main idea(s) into your own words, including only the main point(s). Once again, it is necessary to attribute summarized ideas to the original source. Summaries are significantly shorter than the original and take a broad overview of the source material.

***Turnitin:***

Plagiarism detection software (Turnitin) will be used to screen assignments in this course. Turnitin is primarily a plagiarism detection tool, but can also be used to help students understand academic integrity in written assignments. Turnitin generates 'originality reports' on student submissions, which can provide instructors with information about plagiarized sources, but the reports can also be used to help students understand the proper use of quotation marks, how to cite sources properly, and how to paraphrase.

Students will be given an option if they do not want to have their assignment screened by Turnitin. In the first week of the term, details will be provided about arrangements and alternatives for the use of Turnitin in this course. NOTE: any student not wishing to submit materials for Turnitin detection must contact the instructor within the first week of the term (Turnitin alternate declaration due September 14<sup>th</sup> @ 11:55 pm), to arrange for an alternate format for assignment – including an annotated bibliography for each assignment.

***Unclaimed Assignments***

Unclaimed assignments will be retained until one month after term grades become official in quest. After that time, they will be destroyed in compliance with UW's [confidential shredding procedures](#).

## Course schedule

\*You must complete readings prior to each module. Topics might be adjusted or shifted due to scheduling changes or changing public health guidelines. Both online modules and tutorial activities – will be testable material. Tutorial topics will be posted to LEARN – since we are waiting to see how COVID restrictions evolve throughout the term.

Module Number	Module Topic	Required Readings (See LEARN for Details and Readings) *This will be updated throughout the term.	Tutorials/Labs	Important Dates
1. Sept. 8 <sup>th</sup>	Course Introduction and Administration	<b>Read:</b> Hempel, 2014. Ecoliteracy: Knowledge is Not Enough.	No Tutorials	
2. Sept. 13 <sup>th</sup>	Sustainability	<b>Read:</b> Kashwan, P. 2020. American Environmentalisms Racist Roots Have Shaped Global Thinking about Conservation. The Conversation. Retrieved From: <a href="https://theconversation.com/american-environmentalisms-racist-roots-have-shaped-global-thinking-about-conservation-143783">https://theconversation.com/american-environmentalisms-racist-roots-have-shaped-global-thinking-about-conservation-143783</a>	TBD – See LEARN	
3. Sept. 20 <sup>th</sup>	Core Concepts: Wicked Problems, System and Transdisciplinary Thinking	<b>Read:</b> Waters Foundation. 2010. Habits of a Systems Thinker. Systems Thinking in Schools. Waters Foundation. <b>Read:</b> Balint, P., Stewart, R., Desai, A. and L. Walters. 2011. Wicked Environmental Problems: Managing Uncertainty and Conflict. Case Study of Ngorongoro Conservation Area. Island Press. Washington. pp. 43- 49.	TBD – See LEARN	
4. Sept. 27 <sup>th</sup>	Core Concepts: Adaptive Capacity and Resilience Thinking	<b>Read:</b> Quanrud et al. 2015. Resilience Thinking for Adaptation of Cities to Climate Change. pp. 193 – 204. Conference: U.S.-Iran Symposium on Climate Change: Impacts and Mitigation <b>** Only pages 193-204</b> <b>Read:</b> Cinner et al. 2018. Building Adaptive capacity to climate change in tropical coastal communities. Nature Climate Change. 8:117-123	TBD – See LEARN	
5. Oct. 4 <sup>th</sup>	Sources of Knowledge: Scholarly Sources and Traditional Ways of Knowing	<b>Complete:</b> Two OpenMind lessons <b>Listen to:</b> <a href="https://www.mediasanctuary.org/project/indigenous-voices-at-the-intersection-of-environmental-social-justice-podcast-series/">https://www.mediasanctuary.org/project/indigenous-voices-at-the-intersection-of-environmental-social-justice-podcast-series/</a> - Seeding Sovereignty: The Importance of Indigenous Knowledge Systems & Multi-Generational Stewardship	TBD – See LEARN	<b>DUE:</b> Wicked Problem Concept Map and Description Oct. 4 <sup>th</sup> @11:55PM EST
<b>READING WEEK</b>				
6. Oct. 18 <sup>th</sup>	Sources of Knowledge: Media, Podcasts, Blogs and Op Eds	<b>Complete:</b> Two OpenMind lessons <b>Read:</b> “Fake News Threatens a Climate Literate World.” Nature Communications 8, no. 1 (2017): 15460. <a href="https://rdcu.be/b6cpJ">https://rdcu.be/b6cpJ</a>	TBD – See LEARN	

7. Oct. 25 <sup>th</sup>	Research Questions, Data Collection and Evaluation and Communication of Data	<p><b>Complete:</b> Two OpenMind lessons</p> <p><b>Read:</b> Brod, S. 2014. The Importance of Science Communication. Nature Jobs Blog. Retrieved From: <a href="http://blogs.nature.com/naturejobs/2014/09/04/the-importance-of-science-communication/">http://blogs.nature.com/naturejobs/2014/09/04/the-importance-of-science-communication/</a></p>	TBD – See LEARN	<b>DUE:</b> SERS Badge Oct.25 <sup>th</sup> @11:55PM EST
8. Nov. 1 <sup>st</sup>	Global Environmental Politics and Problem-Solving	<p><b>Complete:</b> Two OpenMind lessons</p> <p><b>Read:</b> Cutter, Susan L. “The Demise of Environmental Governance.” Environment: Science and Policy for Sustainable Development 61, no. 4 (2019): 2–3. <a href="https://dx.doi.org/10.1080/00139157.2019.1618644">https://dx.doi.org/10.1080/00139157.2019.1618644</a></p>	TBD – See LEARN	
9. Nov. 8 <sup>th</sup>	The Economy and the Environment	<p><b>Read:</b> Klein, Naomi. "Capitalism vs. The Climate" The Nation 11/28/2011, Vol. 293 Issue 22, p11-21. 11p. Retrieved from: <a href="https://www.thenation.com/article/capitalism-vs-climate/">https://www.thenation.com/article/capitalism-vs-climate/</a></p> <p><b>Read:</b> Raworth, Kate. "A Safe and Just Space for Humanity: Can we Live Within the Doughnut?" Oxfam Discussion Paper, February 2012. Retrieved From: <a href="https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fspublic/file_attachments/dp-a-safe-and-just-space-for-humanity-130212-en_0_4.pdf">https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fspublic/file_attachments/dp-a-safe-and-just-space-for-humanity-130212-en_0_4.pdf</a></p>	TBD – See LEARN	<b>DUE:</b> OpenMind Workshop Nov. 8 <sup>th</sup> @11:55PM EST
10. Nov. 15 <sup>nd</sup>	Open Mindedness Collective and Individual Action	<p><b>Read:</b> Sorensen, A., Aminpou, P. and S. Gray. 2021. Environmental Problems Require a Diversity of Insights. CANR. Michigan State University. Retrieved from: <a href="https://www.canr.msu.edu/news/environmental-problems-require-a-diversity-of-insights">https://www.canr.msu.edu/news/environmental-problems-require-a-diversity-of-insights</a></p> <p><b>Read:</b> Flaherty, C. 2016. Keeping an Open Mind. Inside Higher Ed. Retrieved from: <a href="https://www.insidehighered.com/news/2016/05/06/new-paper-suggests-open-minded-researchers-produce-higher-quality-research">https://www.insidehighered.com/news/2016/05/06/new-paper-suggests-open-minded-researchers-produce-higher-quality-research</a></p> <p><b>Read:</b> Marris, E. 2020. On the 50<sup>th</sup> Earth Day, take collective action for the planet. Nature. World View. <a href="https://www.nature.com/articles/d41586-020-01123-z">https://www.nature.com/articles/d41586-020-01123-z</a></p>	TBD – See LEARN	<b>DUE:</b> Vegetation Field Study Lab Nov. 15 <sup>th</sup> @11:55PM EST
11. Nov. 22 <sup>nd</sup>	A Sustainable Future?	<p><b>Read:</b> Agyeman, Julian and Duncan McLaren. 2017. “Sharing Cities.” Environment: Science and Policy for Sustainable Development 59, no. 3:22–27. <a href="https://doi.org/10.1080/00139157.2017.1301168">https://doi.org/10.1080/00139157.2017.1301168</a></p> <p><b>Read:</b> Vasic, Jennifer and Tenille Bonoguore. 2019. "Waterloo should set a new course, based on equity and the environment". Waterloo Region Record. April 11, 2019 Thursday. <a href="https://www.therecord.com/opinion-story/9279533-waterloo-should-set-a-new-course-basedon-">https://www.therecord.com/opinion-story/9279533-waterloo-should-set-a-new-course-basedon-</a></p>	TBD – See LEARN	

		<a href="#">equity-and-the-environment/</a>		
12. Nov. 29 <sup>th</sup>	Positive Change, – Interactive Module Using Wakelet  Course Wrap-up	No Readings	TBD – See LEARN	<b>DUE:</b> Paper Discussion Write-up Nov. 29 <sup>th</sup> @11:55PM EST  <b>**Make-Up Day** Closes Nov. 29<sup>th</sup> @ 11:55PM EST</b>
13. Dec. 6 <sup>th</sup>	No Module or Tutorials			

### Evaluation

Your final grade will be based on many different assessments, including individual assignments, a group paper discussion and write-up, module and lab participation and a final take home exam. The professor determines the content and establishes the grading rules for all course components. The teaching assistants will assist the instructor with grading course work. The final exam will be based on concepts from the entire term including tutorials and all content from modules.

<i>Course Component</i>	<i>Percentage</i>	<i>Due Date</i>
Wicked Problem Concept Map and Description (Individual)	<b>10%</b>	Oct. 4 <sup>th</sup>
SERS Badge (Submit 1 of 4 Options) (Individual)	<b>10%</b>	Oct. 25 <sup>th</sup>
OpenMind Workshop (Individual)	<b>10%</b>	Nov. 8 <sup>th</sup>
Ecological Field Study Write-up (Individual* This assignment depends on the ability to get outside. There is the possibility that the weighting could be evenly distributed across the other course components, if due to COVID, we cannot undertake the field study)	<b>15%</b>	Nov. 15 <sup>th</sup>
Paper Discussion and Write-Up (Group* via meeting online)	<b>15%</b>	Nov. 29 <sup>th</sup>
Participation (Individual)	<b>15%</b>	NA
Final Take Home Exam (Individual)	<b>25%</b>	Dec. 13 <sup>th</sup>

**\*\*\*Make-Up Day is Nov. 29<sup>th</sup> (Dropbox closes at 11:55PM EST)\*\*\***

Numeric grades on a scale from 0-100 are used in grading all assignments at the University of Waterloo. The following list will give you an idea of the basis upon which numeric grades are assigned:

- >90%** Work that shows a high level of initiative and is clearly above and beyond what is expected. Referencing, style, grammar/spelling, content and the development of ideas are all superior. (similar to A and A+ in the previous system)
- 80-89%** Work that shows good initiative and is above what is expected. Referencing, style, grammar/spelling, content and the development of ideas are all good. (Similar to B+ and A- in the previous system)
- 70-79%** Work that shows initiative and is about what is expected, but one or more problems are evident in referencing, style, grammar/spelling, content and/or the development of ideas. (Similar to B- and B in the previous system)



60-69%	Work that does not demonstrate initiative, has a series of problems in referencing, style, grammar/spelling, content and/or the ideas, and overall, does not fully convince the reader that the topic has been well considered (Similar to C-, C and C+ in the previous system)
50-59%	Work that is substandard/sloppy in places, has many problems in referencing, style, grammar/spelling, content and/or the development of ideas, and overall, raises more questions in a reader's mind than the work answers. (Similar to D-, D and D+ in the previous system)
40-49%	Work that is of consistently poor quality, demonstrates gaps in comprehension of the assigned material, and/or indicates that not enough time was taken to properly address the assignment. (Similar to F and F+ in the previous system)
<40	Work that is clearly of poor quality, demonstrates a lack of comprehension of the assigned material, shows little attempts at a personal development of ideas or efforts to back up arguments with suitable evidence, and/or indicates that the work was completed 'at the last minute'

### **Requirements, Group Work, Marking, Handing in Assignments and Special Considerations:**

#### ***Readability and Clarity:***

Students are expected to present well organized, and properly written work. Penalties of up to **25%** may be applied in cases where readability and/or clarity are inadequate. There are campus resources to help with your writing. Please make an appointment with the writing and communication centre (<https://uwaterloo.ca/writing-and-communication-centre/>).

Please ensure that you are diligent in **backing up computer files** and making **draft copies** of all assignments, as computer/disk failures, printer problems, etc, will not normally be considered a valid reason to waive the late assignment deduction. NOTE: Perhaps the easiest way to prevent computer file loss is to send to yourself an email attachment of your assignment after each significant work session.

#### ***Multimedia Notes (DVDs, Videos, in-class internet-based videos, etc).***

A portion of the course content is delivered through multi-media materials (DVDs, online audio or video clips), and ALL of this material is valid testing material. Therefore, each student should take comprehensive notes.

#### ***PowerPoint Viewer***

The web addresses for Microsoft PowerPoint viewers (for those who do not have PowerPoint on their computers) is: <http://www.microsoft.com/download/en/details.aspx?id=13>

#### ***Group Work***

Marks for any group assignments will be given as a group mark (not to say that a group member who has not contributed will receive the same grade as the group – in certain circumstances a grade can be given individually). It is your responsibility to inform your TA and your Professor of any problems that you run into when working with your group - *before* the due date of the assignment. It is best that you keep notes from your meetings so that any concerns have been well documents. We will work to address these concerns. Marks will not be adjusted after they have been released.

#### ***Handing in your Assignments:***

- **\*\*You** are responsible for making sure that your professor receives your work. All assignments are to be submitted via LEARN dropbox using the course website.
- **Lost or misplaced assignments:** It is your responsibility to make more than one electronic copy of your work. Excuses are not accepted in the case of crashed computer and lost or misplaced work.

#### ***Tips/Hints:***

- Seek out help from your TAs – they are there to help you
- Begin well in advance of the deadline – last minute work is usually obvious to markers.
- As you write, use the concepts, language and ideas presented in module materials as a source of inspiration/discussion in your assignment.
- Create sub-headings for each of the main sub-sections (you can remove these or keep these later...they are intended as a guide to writing to ensure you address each sub-section!).
- Cite all materials/information you obtain from sources other than your own personal knowledge. The **APA reference** format should be used for all references, including electronic sources.

- Proofread and spell-check your work before submission, please.
- Read assignment resources online. Attend tutorials – this is the best opportunity to talk to your TA and receive help.

### ***Marking of Assignments and Tests:***

Marking will follow the marking rubrics posted to the LEARN site. *You have 14 days (including weekends) from the time the grade appears on LEARN to appeal a grade.* You must first contact your tutorial TA (or the TA that marked your work) and submit a grade re-mark request form (posted on LEARN) to them and set up a time to meet with them (can also be via email). After your discussion meeting, if you would still like a re-mark, you are to email the Professor and provide them a copy of this request form, your completed marking scheme and notes from your meeting with your TA. Please note, that if the Professor grants a re-mark, the entire assignment will be re-marked and your grade could stay the same, go up or even go down. It is not a valid reason to say that you believe you should have a higher grade because a friend in another tutorial section had a similar assignment and received a higher grade. Your assignment is marked as an individual effort and therefore, is unique and is marked as such. If you believe they are similar enough to receive a similar mark, then there might be issues regarding academic integrity.

### **Lectures/Copyright**

Due to the online nature of this course, course content and participation will be video recorded to ensure those students not able to attend in-person will have access to the content. All course content, recordings, tutorial and module material, including all media is property of the University of Waterloo, the course Instructor and/or other sources as noted and are protected by copyright. Do not copy, download or share any course information without clear permission from the University of Waterloo or the course instructor.

### **Evaluation**

**\*\* More details on each area of evaluation will be posted to LEARN and discussed in tutorials. Details on the final exam will be posted to LEARN. \*\***

#### ***Wicked Problem Concept Map and Discussion*** **(Due October 4<sup>th</sup> @ 11:55 PM on LEARN)** **10% of Final Grade**

So why should we look at wicked problems from a systems approach? A systems map can help summarize complex information into a visual form, where connections, feedbacks loops and variables can be explored in greater detail, from various perspectives, in order to discover knowledge gaps, intervention points and possible insights into solutions. You are to create a simplified concept map around one of the complex problems from one of the three articles provided. Detailed requirements will be posted to LEARN.

#### ***Ecological Field Study Write-up*** **(Due November 15<sup>th</sup>, @ 11:55 PM on LEARN)** **15% of Final Grade**

Students will be undertaking vegetation inventories across the University of Waterloo campus. Often a vegetation inventory is required before development can occur in an area. Monitoring plant species over time will help us better understand if an ecosystem is changing, how it is changing (characteristics of change) and what can be done to address those changes. Students will receive an introduction to monitoring techniques and will learn the basics on plant ID using Newcomb's Wildflower Guide. Once back in the lab you will learn the basics of analyzing/interpreting data to determine species richness and diversity. You will then write up a mini lab, including an introduction, discussion of your hypothesis, descriptions of methods used, a table showing your results and a brief discussion. More details of the report will be posted

to LEARN and through discussion with your TAs in your tutorials. Please note that this assignment and lab, will only run if COVID restrictions allow. If your instructor determines this is not possible, the weighting of this course component (15% of final grade) will be evenly distributed across all other course components.

***Paper Discussion and Write-up – Group Assignment***  
**(Due November 29<sup>th</sup> @ 11:55 PM on LEARN)**  
***15% of Final Grade***

This activity is based on research from Heather Parrott and Elizabeth Cherry (2011). This activity has been shown to be particularly motivating to help engage students critically with course readings.

Students will be assigned groups in their tutorial section and then assigned a role (by your TAs) the week before the paper discussion is to take place in tutorials. In the intervening week, students are to complete the posted reading from the lens of the role given to the students. Then during the next tutorial, the following week, students will come prepared to discuss the paper from the requirements of their role. A written report will be compiled based on each students' role and submitted for marking. A more detailed explanation of assignment requirements will be posted to LEARN.

Parrott, H. M., & Cherry, E. (2011). Using structured reading groups to facilitate deep learning. *Teaching Sociology*, 39(4), 354–370. <https://doi.org/10.1177/0092055X11418687>

***OpenMind***  
**(Screenshot Due November 8<sup>th</sup> @ 11:55 PM on LEARN)**  
***10% of Final Grade***

OpenMind is an interactive online program that explores the inner workings of the mind and the psychological roots of our ideological differences. The program will equip you with insights and skills to help you better understand yourself and others. It will empower you to be more in control of your thoughts and feelings so that you can make better decisions, be happier, and navigate challenging conversations more effectively.

The program consists of 8 interactive lessons, each of which takes ~30 minutes to complete. You'll be expected to complete 2 lessons per week over the course of 4 weeks. After you complete each lesson, you'll receive a reminder email to continue moving through the program. At the end of the program there will be a quiz that you will receive a grade on. You are to take a screenshot of your mark and email it to your TA, who will verify it and record your mark.

To begin using OpenMind, please follow these steps:

1. Go to the following link to access OpenMind: <https://openmindplatform.org/app-user?AccessCode=BarbeauUniversityofWaterlooF21>
2. Create a username and password with GuidedTrack.
3. Once you're logged in, you will be guided through a 5 minute orientation to begin using the program.

Note: In case you're prompted, the access code for your group is **BarbeauUniversityofWaterlooF21** (case-sensitive).

**BarbeauUniversityofWaterlooF21**

*Note that your access code is case-sensitive.*

***Participation***  
**15% of Final Grade**

Students are expected to actively participate in each Wakelet module and Wakelet activity, and attend each tutorial having completed all identified tasks and readings. All students will be expected to actively and meaningfully participate in both individual, peer-to-peer and group activities. Those students that approach their module work and come to tutorial prepared to learn, discuss and participate in a thoughtful, meaningful and inclusive way will receive full marks for participation.

***SERS Badges***  
**(Due October 25<sup>th</sup> @ 11:55 PM on LEARN)**  
**10% of Final Grade**

In an effort to allow students to “chase their own adventure” and have a more personal connection to their course work – SERS Badges will be given (albeit virtual badges). Mental health, creating a community of inclusion, being a strong eco-citizen and becoming involved in community groups is an important part of your SERS journey. The details of each badge are discussed on LEARN. You can do all four – however, you will only get credit for one. More details will be posted to LEARN.