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

# ERS 101

# Approaches: Environment, Resources and Sustainability (Winter 2020)

# Instructor:

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Lectures: Tuesdays 12:30 PM – 2:20 PM (EV3 1408) Office Hours: Tuesdays 10:00 AM – 11:00 AM (EV2 2028)

## TAs:

See the LEARN site for TA contact details.

# **Description:**

This course is one of 'solutions-based education' designed to use environmental case studies from local, provincial, national and international communities. We will analyze historical and contemporary cases and consider the interdisciplinary lessons that can be learned from them within the context of climate and technological change, political and economic constraints, community engagement and communication. The specific cases may change year by year depending on current events. Students will be encouraged to critically engage the scholarly, non-governmental, public media literatures and personalities.

# **Intended Learning Outcomes:**

In ERS 101, you will strengthen and extend the skills you developed in ERS 100. Upon completion of the course requirements, you should be able to:

- Understand and explain the roles of, and challenges associated with, different disciplines in defining, analyzing, and resolving environmental issues (in this offering we will be focusing on the problem of single-use plastics however, your knowledge and skills can be applied to any complex environmental problem)
- Begin to critically analyze and evaluate environmental claims and proposed solutions from different disciplinary and stakeholders' perspectives using a case study approach;
- Demonstrate your understanding of the conventions and requirements of scholarly research and communication (e.g., academic integrity, adequate referencing, and effective writing);
- Communicate complex environmental ideas in different formats, including but not limited to, policy briefs, scientific reports and scholarly responses; and,
- Demonstrate your ability to work, and meet deadlines, in a professional team environment.
- Complete the English Language Proficiency Exam (ELPE) milestone, which is a requirement for all students. A grade of 65% or higher in ERS 101 fulfills this milestone.

<sup>&</sup>lt;sup>1</sup> When communicating via email, please identify the course (e.g. "ERS 101") in the subject line. Make sure to use your UW account.

# Approach:

This course is structured in a semi-flipped way. Meaning you are required to do the course readings ahead of time and then be ready to further engage with material in lecture. You will see that most lectures are split into  $\frac{1}{2}$  lecture and  $\frac{1}{2}$  activity. The lecture portion will explore key concepts and ideas further, while the activity will help you engage with the material in a student-centered approach to learning. These activities will range from classroom debates, to group learning, individual activities and videos. The first half of this course, will focus on understanding the complex and messy problem of single use-plastics, while the second half of the course will be focused on solutions at various scales.

# **Required Readings:**

Required readings will be posted to the course's LEARN site and will be updated weekly for the next week. There is no textbook for this course and there will be relatively few readings compared to other courses. This is because I want to introduce you to key theories and concepts with the readings. We will then build upon them in lecture through discussions and in-class activities. It is important that you do the readings *prior* to class, in order to utilize the lecture time to develop your knowledge, and allow for better engagement with the material during our in-class activities. The readings will be testable material for the in-class tests.

# **Communication with Instructors and TAs**

Students' UW email accounts will be used for all communication. Students are responsible to check 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 instructor 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: 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 <u>learnhelp@uwaterloo.ca</u>. **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: <u>https://uwaterloo.ca/learn-help/students</u>. Often, if you log out of LEARN and exit your web browser and then log back in, you can access LEARN again. \*\**Ultimately, if 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, and thus, students are expected to be present at the time of each test. 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)

## **Requests for Extensions: Deadlines**

There is a penalty of 5% per day for late submission of any course assignments, to a maximum of five days (including weekends); after that, the grade will be 0. Exceptions to missed/late course material/quizzes/exams will only be accommodated with documented medical reasons as discussed above. Note, that all dropboxes close at 11:55 PM 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. 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 the coordinator to accommodate your request. Simply missing a deadline, and stating that you are registered with accessibility services is not adequate enough for an extension.

## 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 (<u>www.uwaterloo.ca/academicintegrity</u>). Students who are unsure what constitutes an academic offence are requested to visit the on-line tutorial at: <u>http://www.lib.uwaterloo.ca/ait/</u>.

## Discipline:

A student is expected to know what constitutes academic integrity, to avoid committing academic offence, and to take responsibility for his/her 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, <a href="http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm">http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm</a>. For typical penalties, check Guidelines for Assessment of Penalties, <a href="http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm">http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines/penaltyguidelines.htm</a>

#### 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, <a href="http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm">http://www.adm.uwaterloo.ca/infosec/Policies/policy70</a>. 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) <u>http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm</u>

#### **Consequences of Academic Offences:**

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

## 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). Plagiarism offices 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, 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 <u>confidential shredding procedures</u>.

# **Course schedule**

\*You must complete readings prior to each lecture. Topics might be adjusted or shifted due to scheduling changes.

Class Number	Topic for class	Readings (See LEARN for Details) *This will be updated throughout the term.	Events in Tutorials	Due Dates
1. January 7 <sup>th</sup>	Course Introduction and Admin. Why problem-based learning?		No Tutorials	Turnitin alternate declaration due January, 23 <sup>rd</sup> @ 11:55 pm
2. January 14 <sup>th</sup>	The history of plastics. Disposable Mentality: The psychology of reducing single use plastics – behavioral change Our recycling lie. ½ lecture ½ in class activity	Read course syllabus & Koger & Du Nann Winter 2010. Chapter 2	Determining groups. Defining what makes a good group and group member. Setting out expectations and signing group contracts.	
3. January 21 <sup>th</sup>	The ecological and social impacts of plastics <sup>1</sup> / <sub>2</sub> lecture <sup>1</sup> / <sub>2</sub> in class activity	ТВА	ТВА	January 24 <sup>th</sup> @ 11:55 pm Reading Response Due
4. January 28 <sup>th</sup>	Systems Thinking – Understanding messy and complex problems	ТВА	Designing systems maps	
5. February 4 <sup>th</sup>	Sustainability: the value of plastics <sup>1</sup> / <sub>2</sub> lecture <sup>1</sup> / <sub>2</sub> in class activity	TBA	What is a briefing note – where and how to begin.	February 7 <sup>th</sup> @ 11:55 pm Systems Map Due
6. February 11 <sup>th</sup>	In Class Test #1		No Tutorials	
7. February 18 <sup>th</sup>	READING WEEK			
8. February 25 <sup>th</sup>	Plastic Governance <sup>1</sup> / <sub>2</sub> lecture <sup>1</sup> / <sub>2</sub> in class activity	ТВА	What makes for a good presentation?	February 28 <sup>th</sup> @ 11:55 pm Briefing Note Due

9. March 3 <sup>rd</sup>	Plastic pollution as a social justice issue <sup>1</sup> / <sub>2</sub> lecture <sup>1</sup> / <sub>2</sub> in class activity	TBA	What makes a good poster? Practicing your pitch.	
10. March 10 <sup>th</sup>	Problem Context: in class problem pitches "conference"	TBA	No Tutorials	In-Class Problem Group Presentation
11. March 17 <sup>th</sup>	Strategies for Change: Transdisciplinary Approaches	ТВА	ТВА	
12. March 24 <sup>th</sup>	Approaches to Creating Change: In-class poster presentation first half of lecture Course wrap-up and review	TBA	No Tutorials	In-Class Group Poster Presentations
13. March 31 <sup>st</sup>	In Class Test #2		No Tutorials	

# **Evaluation**

Your final grade will be based on many different assessments, including individual assignments, a group oral and poster presentation, two in-class tests and a final group paper. The professor determines the content and establishes the grading rules for all assignments and tests. The teaching assistants will assist the instructor with grading course work. The first test will be based on the first half of the course material (including all readings, videos and lectures). The second test is mostly based on the second part of the course (including all readings, videos and lectures). Please note, that some key concepts and skills are carried throughout the entire course, and therefore, can appear on both tests.

Course Component	Percentage	Due Date
Reading Summary (Individual)	10%	January 24 <sup>th</sup> , 2020
Systems Map (Individual)	10%	February 7 <sup>th</sup> , 2020
Briefing Note (Individual)	10%	February 28 <sup>th</sup> , 2020
Group Presentation	10%	March 10 <sup>th</sup> , 2020 (In Class)
Group Poster Presentation	15%	March 24 <sup>th</sup> , 2020 (In Class)
In Class Test #1	15%	February 11 <sup>th</sup> , 2020 (In Class)
In Class Test #2	15%	March 31 <sup>st</sup> , 2020 (In Class)
Government Action Plan (Group)	15%	April 14 <sup>th</sup> , 2020

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 (<u>https://uwaterloo.ca/writing-and-communication-centre/</u>).

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 <u>not normally be considered a valid reason to waive the late assignment</u> <u>deduction</u>. 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 <u>comprehensive</u> notes.

#### **PowerPoint Viewer**

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

#### **Group Work**

Marks for all group assignments/presentations 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/presentation. When seeking help regarding a group member, you must provide us with your group contract that was agreed upon in the first tutorial. 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. The assignment is to be submitted via LEARN dropbox using the course website. You are to submit a picture of your poster for further evaluation. Nothing is to be submitted for your group presentation.
- *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.