

## ENVR 2000 *Environmental Science 2 – Issues*

Fall 2025

Department of Environment and Geography

Clayton H. Riddell Faculty of Environment, Earth, and Resources

University of Manitoba



**University  
of Manitoba**

### Course Details

---

<b>Section:</b>	A01
<b>Credit hours:</b>	3
<b>Class times:</b>	MWF 2:30 – 3:20 pm
<b>Location:</b>	Wallace 221
<b>Prerequisites:</b>	ENVR 1000 or BIOL 1340



Gary Larson, *The Far Side* (1985)

"The picture's pretty bleak, gentlemen. ... The world's climates are changing, the mammals are taking over, and we all have a brain about the size of a walnut."

### Instructor Information

---

<b>Instructor name:</b>	Dr. Brock Edwards
<b>Preferred form of address:</b>	Brock
<b>Office location:</b>	Wallace 499
<b>Office hours:</b>	Wednesdays, 12:30 – 2:30 pm (we can also arrange to meet outside this time slot)
<b>Email:</b>	<a href="mailto:brock.edwards@umanitoba.ca">brock.edwards@umanitoba.ca</a> Emails will be answered within 24 hours, Monday to Friday—but I sometimes check emails on weekends.

I look forward to meeting every student! Some correspondence will require documentation and therefore is best done by email (such as requesting special permission).

## About the Course

---

This course will briefly review the major features of the structure and function of natural systems along with the degree to which these have been compromised. The main component of the course, however, will concentrate on the identification of the issues that underlie environmental degradation, while exploring alternative conditions that have the potential to reverse current trends and ultimately contribute to ecological sustainability.

## Course Learning Outcomes

---

By the end of this course, you should be able to:

- Discuss complex environmental issues using basic environmental science terminology
- Demonstrate an in-depth understanding of environmental problems and potential solutions
- Critically evaluate potential solutions to environmental problems on local and global scales

## Course Materials

---

**Required Text:** *Environment: The Science Behind the Stories, 3<sup>rd</sup> Edition*, Withgott, Laposata, and Murck (Eds.), 2018, Pearson Canada.

Physical copies are available at the UM Bookstore (University Centre). There is also a less expensive electronic version (e-book) provided through [Pearson+](#), which can also be purchased at the Bookstore.

Other reading materials will be posted as PDFs or links on the UM Learn course website.



## Course Technology and Communication

---

**Course resources:** Course materials such as lecture slide decks, assignment outlines and miscellaneous resources will be posted to the ENVR 2000 site on UM Learn. Any assignments are to be submitted to their corresponding Dropbox folder in UM Learn on the assigned due date and time.

**Online learning:** Please make sure you have working access to your student UM Zoom account by visiting <https://umanitoba.ca/about-um/tools-working-remotely/zoom>. While this is an in-person course, there may be unforeseen circumstances that require a lecture to be held over Zoom, either synchronous (i.e., during scheduled class time) or pre-recorded for later viewing.

**Communication:** General course communications outside of the classroom will be sent by email. The University requires all students to activate an official University email account. You are required to obtain and use your UM email account for all communication between yourself and the university

([http://umanitoba.ca/admin/governance/governing\\_documents/community/electronic\\_communication\\_with\\_students\\_policy.html](http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html)).

Please note that all communication between myself and you as a student must comply with the electronic communication with student policy. Full details of the Electronic Communication with Students are accessible at: <https://umanitoba.ca/registrar/student-email-policy>.

## Student Guidelines

---

**Attending class:** I strongly recommend you attend class and ask questions. I encourage dialogue within the classroom, but ask that you always remain respectful. While I do post the lecture slides before each class on UM Learn, **it is in your best interest to attend class**. You will get the most out of this course if you make efforts to attend class, engage with the material, ask questions and participate in discussions and exercises.

**Readings:** There will be no other homework for this course in the traditional sense of assignments (e.g., reading responses, blog posts, group projects, term papers). The “homework” instead is **the set of assigned readings given for each unit** (chapters from the course textbook, short supplementary materials), which will both deepen and widen your knowledge of the many topics discussed in class and will lead to greater overall success in this course. Please refer to the syllabus and **complete the assigned readings for that unit before coming to class**.

**Voluntary withdrawal:** The voluntary withdrawal (VW) deadline for this course is **November 18, 2025**.

**Academic integrity:** It is the responsibility of the student to know the university’s policies and regulations concerning academic integrity and plagiarism. Please refer to “Schedule A” policies and resources for students as posted on UM Learn. In addition, please note that:

- (i) group projects are subject to the rules of academic dishonesty;
- (ii) group members must ensure that a group project adheres to the principles of academic integrity;
- (iii) if a group member is not acting with academic integrity or not performing their duties as agreed, please advise the Instructor as soon as possible to resolve any potential problems as early as possible;
- (iv) collaboration between students is encouraged for understanding material, proof-reading a peer’s work, making suggestions on approach, etc.; however,
- (v) all work is to be completed independently unless otherwise specified.

Please note also that the submission of written exercises or assignments that were generated with the partial or full use of artificial intelligence tools (e.g., ChatGPT, Grammarly) will be considered academic misconduct and appropriate action will be taken. **You do not need these tools to succeed in this course.**

Further information on the University’s policy on academic integrity and artificial intelligence is available at: [umanitoba.ca/student-supports/academic-supports/academic-integrity](http://umanitoba.ca/student-supports/academic-supports/academic-integrity).

## Class Schedule

---

The schedule of units for this course is approximate and is subject to change at the instructor's discretion, as per Section 2.8 of the Responsibilities of Academic Staff with Regard to Students ([ROASS](#)) Procedure. Due to holidays and quizzes taking up various lecture slots, a given unit may not be taught within a specified week as suggested by the schedule below. Quiz dates will *not* change, however.

Unit #	Week	Unit	Readings
1	Sep 3–5	Environmental Science, Revisited	Chapter 1
2	Sep 8–12	Earth Systems & Feedback	Chapter 3 Cin-Ty Lee, " <a href="#">Whole Earth Controls on the Evolution of Life</a> " (2023)
3	Sep 15–19	Forests	Chapter 10 <a href="#">Prologue</a> from Stephen Pyne's <i>The Pyrocene</i> (2021)
4	Sep 22–26	Freshwater <i>QUIZ 1 – Wednesday, September 24</i>	Chapter 11
5	Sep 29–Oct 3	Marine & Coastal Systems	Chapter 12
6	Oct 6–10	Atmospheric Science & Air Pollution <i>QUIZ 2 – Friday, October 10</i>	Chapter 13
7	Oct 13–17	Climate Change	Chapter 15
	Oct 20–24		
8	Oct 27–31	Energy <i>QUIZ 3 – Wednesday, November 5</i>	Chapters 16 & 17 Screening of documentary <i>Anthropocene: The Human Epoch</i> (2018)
	Nov 3–7		
–	Nov 10–14	<i>Fall Term Break – no classes</i>	–
9	Nov 17–21	Waste	Chapter 18
10	Nov 24–28	Environmental Policy <i>QUIZ 4 – Wednesday, November 26</i>	Chapter 21 <a href="#">excerpt</a> from W.T. Vollmann's <i>No Immediate Danger</i> (2018)
–	Dec 1–5	Open topic / Final exam review	–

## Course Evaluation Methods

---

Students will be evaluated through **four in-class quizzes** (totalling 50% of the course mark), **ongoing participation in exercises and discussions** (15%), and a **cumulative closed-book final exam** (35%). Each quiz will be divided into two halves: the first half will consist of several basic questions (multiple choice, true/false); the second half will consist of a few short answer questions designed to test the student's comprehension of the course material and their ability to articulate and synthesize different concepts. Quizzes will be administered during class time.

Grades will be posted on UM Learn as soon as marking is complete. If you have any questions about the grading, please bring them to my attention and we can arrange a time to meet and discuss.

Evaluation	Due date	Percentage of course mark
Quiz #1	Wednesday, September 24	12.5%
Quiz #2	Friday, October 10	12.5%
Quiz #3	Wednesday, November 5	12.5%
Quiz #4	Wednesday, November 26	12.5%
Participation / Exercises	<i>ongoing</i>	15%
Final exam	<i>to be scheduled</i>	35%

## Grading Scheme

---

Letter grade	Grade point value	Percentage	Description
A+	4.5	90–100	Exceptional
A	4.0	80–89	Excellent
B+	3.5	75–79	Very Good
B	3.0	70–74	Good
C+	2.5	65–69	Satisfactory
C	2.0	60–64	Adequate
D	1.0	50–59	Marginal
F	0	0–49	Failure

## Missed Quiz / Assignment Policy

---

From the University of Manitoba Provost and Vice-President Academic:

“Students who are unable to meet a course requirement due to medical circumstances are not required to submit medical notes. However, students are required to contact their instructor or academic advisor by email to inform of the missed work and to make arrangements for extensions, deferrals, or make-up assignments. Please follow these guidelines if you are unable to meet an academic requirement for your courses:

- Contact your instructor (me) for term work such as quizzes and assignments **no later than 24 hours before**.
- Contact an advisor in your faculty/college/school of registration for a missed final exam (scheduled in the final examination period).
- Inform your instructor/advisor as soon as possible do not delay. Note for final exams, students must contact **within 48 hours** of the date of the final exam.
- Email your instructor/advisor from a **U of M email address** and include your full name, student number, course number, and academic work that was missed.”

For ENVR 2000, except in extraordinary circumstances, **make-up quizzes will not be offered**. The portion of the course mark from the missed quiz will be moved to subsequent quizzes/other modes of evaluation at the instructor’s discretion, in consultation with the student.

## Learner Supports

---

If you are a student with a disability, please contact Student Accessibility Services (SAS) for academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g., mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services

[umanitoba.ca/student-supports/accessibility](http://umanitoba.ca/student-supports/accessibility)

520 University Centre

University of Manitoba

204 474 7423

[student\\_accessibility@umanitoba.ca](mailto:student_accessibility@umanitoba.ca)

It can be difficult to learn and succeed in courses when you are struggling to meet your or your family’s basic needs. Several UM and community resources are listed below if you would benefit from support with regards to housing, food, finances, and/or childcare:

*Food*

- [U of M Food Bank](#)
- [Food Matters Manitoba](#)

### *Housing*

- [UM Housing](#)
- [Winnipeg Rental Network](#)
- [Manitoba Residential Tenancies Branch](#)
- [HOPE End Homelessness Winnipeg Services & Supports \(https://umanitoba.ca/housing\)](https://umanitoba.ca/housing)

### *Finances*

- [UM Financial Aid and Awards](#)
- [Manitoba Student Aid](#)

### *Child Care*

- [UM Child Care](#)
- [Manitoba Child Care Subsidy](#)
- [Manitoba Child Care Association](#)

Part of my commitment to student success is accommodating a diversity of needs and learning approaches to ensure that all students receive the support and attention they deserve. If you are facing any challenges related to food or housing and feel that it may be affecting your learning in this course, please reach out to me if you are comfortable doing so. I will do my best to help you access available resources and we can work together to ensure you achieve success in ENVR 2000.

## **Traditional Territories Acknowledgement**

---

The University of Manitoba campuses are located on original lands of Anishinaabeg, Cree, Oji-Cree, Dakota, and Dene peoples, and on the homeland of the Métis Nation. We respect the Treaties that were made on these territories, we acknowledge the harms and mistakes of the past, and we dedicate ourselves to move forward in partnership with Indigenous communities in a spirit of good-faith reconciliation and collaboration. Where I teach, the water comes from Treaty 3, the shores of Shoal Lake First Nations, and the electricity comes from generating stations on rivers in Treaty Areas 1, 3, and 5.

Because this land acknowledgement *does not constitute reconciliation by virtue of its inclusion here*, we will intentionally work towards reconciliation in this course by identifying and questioning the ways in which environmental issues disproportionately affect those who suffer from socioeconomic inequalities, from hydroelectric development to global climate change.

## **Use of Copyrighted Material**

---

Students are expected to respect copyright. Copyrighted content used will be used in this course in accordance with copyright laws and university guidelines. Copyrighted works, including course materials created by Dr. Brock Edwards (such as PowerPoints, handouts, or notes), are made available for private study and research and must not be shared or distributed in any format without authorization (including to course note sharing or tutoring websites such as Course Hero, Chegg, etc.). Violating copyright can result in serious consequences for students at the University of Manitoba, including (but not limited to) allegations of academic and non-academic misconduct. If you have

questions or need help see the University of Manitoba's Copyright Office website (<http://umanitoba.ca/copyright/>) or contact [um.copyright@umanitoba.ca](mailto:um.copyright@umanitoba.ca).

No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without written permission by Dr. Brock Edwards. This includes taking pictures of the slides during the lectures or quiz questions. If recording needs to be done for accessibility or accommodation reasons, please contact your instructor.