



**University of Manitoba**  
**CHR Faculty of Environment, Earth, and Resources**  
**Department of Environment and Geography**

**ENVR 2810 A01: ENVIRONMENTAL CRITICAL THINKING & SCIENTIFIC RESEARCH**

**COURSE SYLLABUS: FALL 2023**

### **Territory 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 reconciliation and collaboration.*

## TABLE OF CONTENTS

TERRITORY ACKNOWLEDGEMENT .....	1
COURSE DETAILS.....	3
INSTRUCTOR CONTACT INFORMATION.....	3
COURSE DESCRIPTION .....	3
COURSE MATERIALS .....	4
WHAT YOU CAN EXPECT FROM US.....	4
WHAT WE CAN EXPECT FROM YOU .....	4
VOLUNTARY WITHDRAWAL DATE.....	4
GRADE DISTRIBUTION.....	5
COURSE EVALUATION METHODS.....	5
ASSESSMENT DESCRIPTIONS.....	5
DUE DATES .....	6
EXTENSION AND LATE SUBMISSION POLICY .....	6
CLASS SCHEDULE.....	7
REFERENCING STYLE .....	7
COURSE TECHNOLOGY .....	8
CLASS COMMUNICATION.....	8
USING COPYRIGHTED MATERIAL .....	8
ACADEMIC INTEGRITY.....	9
UM POLICIES AND RESOURCES .....	10

## Course Details

---

<b>Course Title &amp; Number:</b>	ENVR 2810 A01
<b>Number of Credit Hours:</b>	3 credit hours
<b>Class Times &amp; Days of Week:</b>	Wednesday 2:30 – 5:15 pm
<b>Location:</b>	221 Wallace
<b>Prerequisites:</b>	ENVR 1000 (C) or GEOG 1280 (C) or GEOG 1290 (C); GEOG 1700 (C) or GPE 1700 (C); or consent of department.

## Instructor Contact Information

---

<b>Instructor(s) Name:</b>	Dr. John Iacozza and Dr. Kristina Brown
<b>Preferred Form of Address:</b>	John/Kristina or Dr. Iacozza/Brown
<b>Office Location:</b>	250 Wallace (Dr. Iacozza) and 535 Wallace (Dr. Brown)
<b>Office Hours or Availability:</b>	By appointment. Please email to set a time.
<b>Office Phone No.</b>	474-8483 (Dr. Iacozza) and 272-1540 (Dr. Brown)
<b>Email:</b>	John.Iacozza@umanitoba.ca; Kristina.Brown@umanitoba.ca
<b>Contact:</b>	We can be reached from 9 am and 4 pm Monday to Friday. We aim to respond to emails or phone calls within 48 hours, except on weekends.

## Course Description

---

In many circumstances, we do not question or evaluate our assumed knowledge. This can be in class, by the media, by friends and 'experts', along with the personal beliefs we hold, scientific or other. This class will attempt to engage students to engage critically about what they are taught and to use a rationale, evidence-based reasoning to evaluate claims that have either implicit or explicit scientific or objective underpinnings. Thinking critically is not the same as being critical. Students are encouraged to question the instructors and each other, while remembering that the key to a successful discussion is always grounded in a respect and courtesy for those whose beliefs you are attempting to sway or understand. Another element of this course will focus on applying that skepticism and critical thinking to develop well balanced research hypotheses and data collection methods. The way a question is structured in an experiment, a survey, or an interview can affect the answer the respondent provides. Minimizing bias and increasing accuracy in the method used to collect the information is a critical step in evaluating and solving environmental and geographical issues.

---

## Course Materials

---

Readings for each week will be posted in UMLearn prior to the lecture.

All students have access to Office365 through the university. You are expected to save your assignments/term paper/exam to the cloud using this program to ensure material is not lost through technological issues.

---

## What You Can Expect From Us

---

- We will listen actively and be respectful ([Respectful Work and Learning Environment Policy.](#))
- We will keep conversations confidential, sharing ideas but not specific stories or names.
- We will be punctual for all class times and meetings.
- We will be available for meetings outside of class times to discuss course material and assignments/term paper. Please feel free to make an appointment through email if you are not available during office hours.
- We will have assignments (normally) graded within 2 weeks of submission. Grades are provided through UMLearn, and will consist of both formative (i.e. comments) and summative (i.e. grade) assessment.

---

## What We Can Expect From You

---

- You will treat us, and other students with respect ([Respectful Work and Learning Environment Policy.](#))
- You will accept that it is OK not to know, both for yourselves and others, and ask questions when you need to.
- You will attend lectures and take notes, as well as participating in class discussions.
- You will make every effort to read any assigned readings *prior to the unit*.
- You will complete the necessary assignments individually and on time, unless otherwise stated. Students may consult with other students; however, it is expected that all assignments will be submitted in the student's own words. (See section of course outline on *Academic Integrity*).

---

## Voluntary Withdrawal Date

---

The voluntary withdrawal date is the last date for withdrawing from this course without academic penalty. The voluntary withdrawal date for this course is **November 21, 2023**. Evaluative feedback will be provided prior to this date.

## Grade Distribution

---

<i>LETTER GRADE</i>	<i>PERCENTAGE RANGE</i>	<i>DESCRIPTION</i>
A+	90-100	Exceptional
A	80-89.9	Excellent
B+	75-79.9	Very Good
B	70-74.9	Good
C+	65-69.9	Satisfactory
C	60-64.9	Adequate
D	50-59.9	Marginal
F	0-49.9	Failure

**NOTE:** All final grades are subject to departmental review.

## Course Evaluation Methods

---

The final grade will be evaluated based on three components, including assignments, term paper, and take-home exam. The breakdown of marks is:

<i>EVALUATION</i>	<i>PERCENTAGE</i>
Assignments (3 in total; 10% each)	30%
Term Paper outline	10%
Term Paper	30%
Take-Home Final Exam	30%
<b>TOTAL</b>	<b>100%</b>

## Assessment Descriptions

---

### Assignments

Assignments must be submitted as a SINGLE PDF DOCUMENT and electronically through UMLearn. The course website is available for registered students at: umlearn.ca. Your login name and password are the same as your email/UMnetID. If you are not familiar with this tool, please reach out to IST. Documents **MUST** be labelled with the student's name, student number, and assignment number as a cover page. Emailed assignments WILL NOT be accepted at any time for any reason and therefore will not be graded. Assignment grades will be posted on UMLearn.

### Take Home Final Exam

You will have at least two weeks from handout date to complete the take home exam. You must complete the take home exam individually and properly reference all material used in the exam. See *Referencing Style* section of syllabus for more information on the accepted style.

## Due Dates

---

The following table lists the tentative dates for the assignments, term paper and take-home exam for the course. Please note that the dates may be extended if required; students will be advised of any changes in advance of the deadline. Assignments and take-home exam are due by **2:30 pm Central Time**.

<i>ASSIGNMENT</i>	<i>DUE DATE</i>
Assignment 1 – Dr. Iacozza	September 27, 2023
Term paper topic approval – Dr. Brown	By September 27, 2023
Term paper outline – Dr. Brown	October 11, 2023
Assignment 2 – Dr. Brown	October 25, 2023
Assignment 3 – Dr. Iacozza	November 29, 2023
Term paper – Dr. Brown	December 6, 2023
Take-home exam released	November 29, 2023
Take-home exam due	December 15, 2023

## Extension and Late Submission Policy

---

Assignments must be handed in on time – by 2:30 pm on due date. **A penalty of 10% per day** will be given to any late assignment unless the student has obtained Instructor approval 48 hrs in advance (assignments) or 7 days in advance (term paper) of the deadline. (See below for accepted reasons for granting an extension)

For take home exam, a mark of zero will be given to any exam that is handed in late unless permission is granted prior to the deadline. Please see list below for acceptable and unacceptable reasons for rewriting the take home exam (which will be a new and different exam with a one-week window to write). Instructor approval is required 7 days in advance of the deadline for the take home exam.

Reasons for granting an extension (assignments): a death in your immediate family, a severe illness in either yourself or in a dependent, and student is required to travel for work such as armed forces deployment. Students who are unable to meet a course requirement due to medical circumstances are currently not required to submit medical notes.

Reasons for not granting an extension: having another assignment or midterm on the same day, being away from the university for a personal reason (i.e. holiday or personal vacation), being too busy with other course work (i.e. having a midterm that same day or week), not attending the lectures due to personal reasons, car broke down and could not submit assignment on time, computer is not working properly and you lost the assignment, or any other reason deemed inappropriate by the Instructor. This is not an exhaustive list. If you know you will be away, the assignment **MUST** be submitted by the stated due date.

## Class Schedule

---

<b>DATE</b>	<b>TOPIC</b>
SEPTEMBER 6	Introduction to course; basic concepts and ideas related to critical thinking and scientific research ( <b>Jl</b> )
SEPTEMBER 13	Research Philosophy: Arguments and Paradigms ( <b>Jl</b> )
SEPTEMBER 20	How to think skeptically and critically, why you need to be comfortable changing your mind, and what happens when you don't ( <b>Kb</b> )
SEPTEMBER 27	The history, process, and outcomes of peer review: Part 1 ( <b>Kb</b> )
OCTOBER 4	The history, process, and outcomes of peer review: Part 2 ( <b>Kb</b> )
OCTOBER 11	Research Philosophy: Approaches and Ethics ( <b>Jl</b> )
OCTOBER 18	Research Philosophy: Research Bias and Error ( <b>Jl</b> )
OCTOBER 25	How your perceptions can lead you astray, and what this means when you are trying to be a rational thinker: Part 1 ( <b>Kb</b> )
NOVEMBER 1	How your perceptions can lead you astray, and what this means when you are trying to be a rational thinker: Part 2 ( <b>Kb</b> )
NOVEMBER 8	Special Topic and Guest Lecturer
NOVEMBER 15	<b>Reading Break</b>
NOVEMBER 22	Research Design and Collection I ( <b>Jl</b> )
NOVEMBER 29	Research Design and Collection II ( <b>Jl</b> )
DECEMBER 6	Review of course ( <b>Kb and Jl</b> )

This schedule is subject to change at the discretion of the Instructor and/or based on the learning needs of the students but such changes are subject to Section 2.8 of the – [ROASS-Procedure](#)).

## Referencing Style

---

Assignments should use the APA reference style as outlined in the text:  
 American Psychological Association. (2009). Publication manual of the American Psychological Association (6th ed.). Washington, DC: Author. Information can also be found on the UM Libraries website: <http://libguides.lib.umanitoba.ca/c.php?g=298394>.

If you use the course lectures to answer any questions in the assignments, you must properly cite the course notes. This can be found in the APA reference style.

---

## Course Technology

---

It is the general University of Manitoba policy that all technology resources are to be used in a responsible, efficient, ethical and legal manner. The student can use all technology in classroom setting only for educational purposes approved by Instructor and/or the University of Manitoba Disability Services. Student should not participate in personal direct electronic messaging / posting activities (e-mail, texting, video or voice chat, wikis, blogs, social networking (e.g. Facebook), online and offline “gaming”) during scheduled class time. If student is on call (emergency) the student should switch his/her cell phone on vibrate mode and leave the classroom before using it. Should the semester be switched to Remote Learning, your computer or device, and internet connection must meet the UM minimum requirements. You should be familiar with Zoom, the video conferencing system, as well as UMLearn, the course management software used by the University of Manitoba. You can access online resources for UMLearn through [Centre For The Advancement Of Teaching & Learning](#).

---

## Class Communication

---

Ensure that the course name and number are included in the subject line for all emails. Please make sure emails are written in a professional manner, including complete sentences and do not use text language. Emails must be sent from University of Manitoba email accounts; emails from other accounts (such as gmail) will not be responded to.

You are required to obtain and use your University of Manitoba email account for all communication between yourself and the university. All communication must comply with the Electronic Communication with Student Policy:

[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)

---

## Using Copyrighted Material

---

John Iacozza, Kristina Brown, and the University of Manitoba hold copyright over the course materials, presentations and lectures that form part of this course. 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 John Iacozza and/or Kristina Brown. Course materials (both paper and digital) are for the participant’s private study and research.

Please respect copyright. We will use copyrighted content in this course. We have ensured that the content use is appropriately acknowledged and is copied in accordance with copyright laws and University guidelines. Copyrighted works, including those created by us, are made available for private study and research and must not be distributed in any format without permission.

Do not upload copyrighted works to a learning management system (such as UM Learn), or any website, unless an exception to the Copyright Act applies or written permission has been confirmed. For more information, see the University’s Copyright Office website at <http://umanitoba.ca/copyright/> or contact [um\\_copyright@umanitoba.ca](mailto:um_copyright@umanitoba.ca).



## Academic Integrity

---

Unless otherwise stated, complete your assignments, term paper and take-home exam by yourself with no help from your class peers, family members, or from tutors that are not approved by the instructors. If you are in need of assistance, please contact the instructors immediately for support and/or to arrange for approved supports.

**Academic Integrity:** Academic dishonesty (plagiarism, cheating) is a very serious matter in any academic institution and is dealt with severely at the University of Manitoba.

*Plagiarism* or any other form of cheating in examinations, quizzes or academic work is subject to serious academic penalty (e.g. suspension or expulsion from the faculty or university).

Cheating in examinations or tests may take the form of copying from another student or bringing unauthorized materials into the exam room (e.g., crib notes, pagers or cell phones).

Exam cheating can also include exam personation (see below). A student found guilty of contributing to cheating in examinations or term assignments is also subject to serious academic penalty, including a grade of zero on the assignment/exam, a final grade of F in the course or expulsion from the University (based on severity of offense).

To plagiarize is to take ideas or words of another person and pass them off as one's own. In short, it is stealing something intangible rather than an object. Plagiarism applies to any written work, in traditional or electronic format, as well as orally or verbally presented work. Obviously it is not necessary to state the source of well-known or easily verifiable facts, but students are expected to appropriately acknowledge the sources of ideas and expressions they use in their written work, whether quoted directly or paraphrased. This applies to diagrams, statistical tables and the like, as well as to written material, and materials or information from Internet sources. Students must use APA style to properly reference work.

To provide adequate and correct documentation is not only an indication of academic honesty but is also a courtesy, which enables the reader to consult these sources with ease. Failure to provide appropriate citations constitutes plagiarism. It will also be considered plagiarism and/or cheating if a student submits an assignment or exam written in whole or in part by someone other than him/herself, or copies the answer or answers of another student in any assignment or exam.

Working with other students on assignments or on-line tests, when not permitted by the instructors, can constitute Inappropriate Collaboration and may be subject to penalty under the Student Discipline By-Law.

An assignment that is prepared and submitted for one course should not be used for a different course. This is called "duplicate submission" and represents a form of cheating because course requirements are expected to be fulfilled through original work for each course.

Please familiarize yourself with the University policy on academic dishonesty found on the following website:

[http://www.umanitoba.ca/student/resource/student\\_advocacy/cheating\\_plagiarism\\_fraud.html](http://www.umanitoba.ca/student/resource/student_advocacy/cheating_plagiarism_fraud.html).

When in doubt about any practice, ask your instructors.

*Examinations Personations* is when a student who arranges for another individual to undertake or write any nature of examination for and on his/her behalf, as well as the individual who undertakes or writes the examination, will be subject to discipline under the university's

Student Discipline Bylaw, which could lead to suspension or expulsion from the university. In addition, the Canadian Criminal Code treats the personation of a candidate at a competitive or qualifying examination held at a university as an offence punishable by summary conviction. Section 362 of the code provides:

*Personation at Examination*

362. Everyone who falsely, with intent to gain advantage for him/herself or some other person, personates a candidate at a competitive or qualifying examination held under the authority of law or in connection with a university, college or school or who knowingly avails him/herself of the results of such personation is guilty of an offence punishable on summary conviction. 1953- 54, c.51, s.347.

Both the personator and the individual who avails him/herself of the personation could be found guilty. Summary conviction could result in a fine being levied or up to two years of imprisonment.

A complete copy of the Final Examination Procedures is available at:

[http://umanitoba.ca/admin/governance/governing\\_documents/academic/final\\_examinations\\_procedures.html](http://umanitoba.ca/admin/governance/governing_documents/academic/final_examinations_procedures.html)

Students are encouraged to review the University policy on Responsibilities of Academic Staff with Regards to Students (ROASS):

[http://umanitoba.ca/admin/governance/governing\\_documents/students/278.html](http://umanitoba.ca/admin/governance/governing_documents/students/278.html)

## **UM Policies and Resources**

---

Students should familiarize themselves with the policies and resources at the University of Manitoba under ROASS (Responsibilities of Academic Staff with Regard to Students). A document has been prepared and is available in UMLearn under the Content Tab. If you have any questions about the policies or resources, please contact the Instructors. I would be happy to help guide you through anything listed in the document.