

GEOG 3432B – Environmental Hazards and Human Health

Course Outline: Section 001 Winter 2025

This course is taught in-person

1. Course Information

*Details about design and delivery of the course are listed below in Section 6



Classes Start	Spring Reading Week	Classes End	Study day(s)	Exam Period
January 6	February 17-23	April 4	April 5 & 6	April 7-30

January 14, 2025: Last day to add a second-term half course

February 17, 2025: Family Day

March 31, 2025: Last day to drop a second term half course without penalty

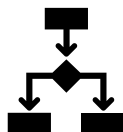


Course Instructor	Contact Information	Office Hours
Jamie Baxter	jamie.baxter@uwo.ca	Mon 3:30 to 4:30 in person or by appointment (in-person or Zoom)

Teaching Assistants	Contact Information	Office Hours
TBA	TBA	TBA
TBA	TBA	TBA

2. Calendar Description

This is a survey course regarding the links between human health and environmental hazard exposure. Issues will include the health impacts of water pollution, air pollution, solid and hazardous waste, toxic substances, pesticides and radiation. The limitations of models and methods are discussed.



2 lecture hours, 0.5 course

1 tutorial hour

Antirequisite(s): None

Prerequisite(s): None

3. Textbook

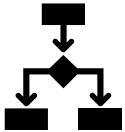


- All resources will be posted in OWL
- Environments, Risks and Health, Social Perspectives, ISBN 9780367668136 – available in hard, paperback and e-book versions – new or used – (there is only one edition) . See Section 6 for specific chapters. This text is “required” to the extent you need to read those chapters.
- Additional resources - A laptop and/or smartphone will be useful throughout the term. We will use iclicker with these devices (that material will not be graded).

4. Course Objectives and Format

In this course we want to create an environment for an exchange of ideas on the social science of environment and health. There will be opportunities for in-class interaction through think-pair-share and similar exercises.

All course material will be posted to the new OWL Brightspace learning environment: <https://westernu.brightspace.com/d2l/home>. Any changes will be indicated on the OWL site and discussed with the class.



Current versions of all popular browsers (e.g., Safari, Chrome, Edge, Firefox) are supported with OWL Brightspace; what is most important is that you update your browser frequently to ensure it is current. All JavaScript and cookies should be enabled.

If students need assistance, they can seek support on the OWL Brightspace Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

5. Learning Outcomes

Upon successful completion of this course, students will be able to:

- Enhance critical understanding of how human uses of the environment impact human health
- Develop knowledge and critical understanding of the fundamental characteristics, processes, temporal changes and landscapes of social and biophysical systems and their interactions.
- Relate specialized understanding of the geography of bio-physical systems to knowledge and practices in environmental and natural sciences
- Analyze real-world problems and policy applications using geographical concepts, skills and understanding.
- Communicate geographic ideas and understanding effectively to a variety of audiences in writing, orally, and graphically



6. Course Content and Schedule

Lectures

Week	Dates	Topic	Readings
1	January 6	Scope of Course	None
2	January 13	Introduction - Key Concepts	Eyles and Baxter
		Discussion Assignment 1	Preface, Ch 1
3	January 20	Measuring health-environment links: Toxicology	Eyles and Baxter Ch 3
4	January 27	Measuring health-environment links: Epidemiology	Eyles and Baxter Ch 4
5	February 3	Contaminants in air	Moeller Ch 5*
6	February 10	Risk assessment and management	Eyles and Baxter Ch 9
		Guest lecture	
		Assignment 1 due (48hr submission window)	
	February 17	Spring Reading Week	None
7	February 24	Midterm test	
8	March 3	The role of social theory	Ch 2, 5
		Discussion Assignment 2	
9	March 10	Built Environment and health	Frank et al. Ch 1, 2*
10	March 17	Environmental equity and justice	Eyles and Baxter Ch 8
11	March 24	Environmental health and the media	TBA*
12	March 31	Assignment 2 due	
		Review for exam	

* readings that are not from the text will be provided

Tutorials

Week	Dates	Topic	Readings
2	January 14	Introduction – Ice/Breaker	None
3	January 21	Epidemiology in contaminated communities	Heath et al. (1984) Bari Kolata (1980) Holden (1980)
4	January 28	Case study: Love Canal NY Water contamination	Hrudey et al. (2003), Parr (2005)
9	March 11	Built environment and health (obesity) Case studies: Wales, Ireland	Morland and Evenson (2009) Seliske et al. (2009)
10	March 18	Environmental justice Case study: Mi'kmaq	Lewis et al. (2021) TBD

7. Communication



- Students should check the OWL site every 24 – 48 hours
- I will post news items from time to time to keep everyone up-to-date and clarify any issues that arise
- For administrative purposes your UWO email is preferred. One way to do this is by emailing the instructor and teaching assistant from within OWL Brightspace
- For any other communication, the centrally administered **e-mail account** provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner. You can read about the privacy and security of the UWO email accounts [here](#).
- The instructor/TA response time for emails is typically 24 – 48 hours
- Discussion boards will be available in Brightspace, for student peer support. The instructor and TA will do their best to monitor and respond to threads. That said, email is the best way to get direct responses to pressing questions.

8. Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated.

Assessment	Format	Weighting	Due Date
Participation	In tutorial and lecture	10%	Jan 6 to Mar 31, 2025
Assignment 1	NPRI pollution over time and space (analysis using a spreadsheet)	15%	Feb 10, 2025
Midterm test	1.5 hours. Multiple choice, true false, definitions, short answer (no essay). All answers must fit in space provided on the test.	20%	Feb 24 at the beginning of lecture time in the lecture room
Assignment 2	Essay: Evidence linking exposure and outcome	20%	Mar 31, 2025
Final exam	3 hours. Multiple choice, true false, definitions, short answer, essay. All answers must fit in space provided on the exam.	35%	See exam timetable.



The evaluation methods described in the course outline are essential requirements for the course.

Students are responsible for material covered in the lectures as well as the assigned chapters/sections in the text and other readings. Students must complete all evaluated components in the course (2 assignments, midterm and final).

- All assignments are due at 11:55 pm EST unless otherwise specified
- Written assignments will be submitted to Turnitin (statement in policies below)
- Students will have unlimited submissions to Turnitin

- After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within 7 days

Click [here](#) for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

Grade equivalences		
A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail

Grades will not be adjusted on the basis of need. It is important to monitor your performance in the course. Remember: *You* are responsible for your grades in this course.

9. Accommodation Policies

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#).

General Information about missed work:

University policy on academic considerations are described [here](#). This policy requires that all requests for academic considerations must be accompanied by a self-attestation. Further information about academic considerations, and information about submitting this self-attestation with your academic consideration request may be found here.

Please note that any academic considerations granted in this course will be determined by the instructor, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline.

Flexibility statements

Please note that because the submission deadline for assignment 1 already includes flexibility in the form of a 48-hour submission window, the instructor reserves the right to deny academic consideration for assignments which are submitted following the end of the period of flexibility.

Absence from Course Commitments

Students must familiarize themselves with the [Policy on Academic Consideration – Undergraduate Students in First Entry Programs](#)

Students missing course work for medical, compassionate or extenuating circumstances can request academic consideration by completing a request at the central academic consideration portal. Students are permitted one academic consideration request per course per term

without supporting documentation. Note that supporting documentation is **always** required for academic consideration requests for examinations scheduled by the office of the registrar (e.g. December and April exams) and for practical laboratory and performance tests typically schedule during the last week of the term. Students should also note that the instructor may designate one assessment per course per term that requires supporting documentation. This designated assessment is described elsewhere in this document. Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline. Supporting documentation for academic considerations for absences due to illness should use the Student Medical Certificate or, where that is not possible, equivalent documentation by a health care practitioner.

Course Assessments that Require Supporting Documentation

For this course the following assessment has been designated as requiring supporting documentation:

Midterm test – February 24, 2025

Academic Consideration for Course Components with Flexible Deadlines

This course employs a flexible deadline for assignment 1. The assignment deadline can be found above in the course outline. Students are expected to submit the assignment by the deadline listed. Should illness or extenuating circumstances arise, students are permitted to submit their assignment up to 48 hours past the deadline without academic penalty. Should students submit their assessment beyond 48 hours past the deadline, a late penalty of 5% per day (Mon to Fri only) will be subtracted from the assessed grade. As flexible deadlines are used in this course, requests for academic consideration will not be granted. If you have a long-term academic consideration or an accommodation for disability that allows greater flexibility than provided here, please reach out to your instructor at least one week prior to the posted deadline. Assignment 2 posters are group assignments that must be presented on the due date in class.

Accommodation for Religious Holidays

Students should review the policy for Accommodation for Religious Holidays. Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but not later than two weeks prior to writing the examination/term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible but not later than one week prior to the midterm.

10. Make-up Examinations

A Special (make-up) Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents.

The format and content of make-ups may differ substantially from the scheduled test or examination.

You can find the policy [here](#)

11. Use of Electronic Devices

No electronic devices will be allowed during tests and examinations.

We will be using iclicker throughout the term. You can access this system online through any device with a web browser. This will be used for feedback on how well key aspects of the course are being taken up by students and for general sharing and discussion. None of the responses using iclicker will be graded. Iclicker will not be used to take attendance (there is no attendance mark, but there is a *participation* mark. Further, those who attend will be rewarded for attendance with in-class hints for assignments, the midterm and final exam).

12. How to Be Successful in this Class:

Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.

1. Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term and schedule time at the start of each week to get organized and manage your time.
2. Come to lecture. While the lectures are posted on OWL, the material sinks in better through multiple forms of exposure.
3. Make it a daily habit to log onto OWL to ensure you have seen everything posted to help you succeed in this class
4. Take notes as you go through the lesson material – hand-written or electronically.
5. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards or contact your instructor(s) and or teaching assistant(s).



13. Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

14. Western's Commitment to Accessibility

The Department of Geography and Environment strives at all times to provide accessibility to all faculty, staff, students and visitors in a way that respects the dignity and independence of people with disabilities.

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish

to contact Services for Students with Disabilities (SSD) at 519-661-2147 for any specific question regarding an accommodation. Information regarding accommodation of exams is available on the Registrar's website.

More information about "Accessibility at Western" is available.

15. Mental Health

If you or someone you know is experiencing distress, there are several resources here at Western to assist you. Please visit Western's Health and Wellness website for more information on mental health resources.

16. Support Services

Western's Support Services
Student Development Centre

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

17. Important Dates

Monday January 6: Classes resume

Tuesday January 14: Last day to add a second term half course

Monday February 17: Family Day – Department Office Closed

February 17-23: Spring Reading Week (No classes; Department Office open)

Friday March 31: Last day to drop a second term half course

Friday April 4: Classes end

April 5 and 6: Study days

April 7-30: Examination Period