

GEOG 2430A - Public Health and Environment
Course Outline: Section 001 - Fall 2026
This course is taught in-person
1. Course Information

Classes Start	Fall Reading Week	Classes End	Study Day(s)	Exam Period
September 9	October 10-18	December 9	TBC (see Registrar)	TBC (see Registrar)

September 17, 2026: Last day to add or drop a Fall 12-week course without it appearing on a transcript (no fee penalty). Courses dropped after this date appear on a transcript with a grade of WDN (withdrawn, without academic penalty).

September 30, 2026: National Day for Truth and Reconciliation (observed as a non-instructional day at Western). Students are encouraged to attend the Sunrise Ceremony and campus events.

October 12, 2026: Thanksgiving Holiday (falls within Fall Reading Week, Oct 10-18)

November 30, 2026: Last day to withdraw from a Fall 12-week course resulting in a grade of WDN (withdrawn, without academic penalty). Withdrawals after this date appear on a transcript with a grade of F.

Course Instructor	Contact Information	Office/Office Hours
Dr. Vanessa Ambtman-Smith	vambtman@uwo.ca	Tuesdays 12:00-1:00 pm via Zoom or by appointment
Teaching Assistant(s)	Contact Information/Email	Office/Office Hours
TBA	TBA	TBA

2. Calendar Description
2.1. Course Description

This course introduces students to current issues in health geography. Through examples, students will learn the important role of geography in disease ecology and its role in explaining patterns of infectious, communicable, chronic diseases and mental health. The linkages between population, environment and health will also be introduced.

2 lecture hours, 1 tutorial hour, 0.5 course

Antirequisite(s): N/A

Prerequisite(s): N/A

Prerequisite checking is the student's responsibility.

2.2. Senate Regulations

Senate Regulations state, “unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you will be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.”

3. Textbook and Readings

Required text: *Geographies of Health - An Introduction*, by Anthony Gatrell and Susan Elliott (available at the Western bookstore); 3rd Ed.; ISBN: 978-0-470-67287-7

In addition to the course text, required articles and chapters will be posted on OWL Brightspace (open access or library-licensed, at no cost), including:

- Carroll, D., Vandermeer, J., Nakehk'o, D., Zoe, J.B., Mackenzie Vukson, C., & Redvers, N. (2026). Sitting by the Fire: Dene Perspectives on Indigenous Traditional Ecological Knowledges, Land Stewardship, and Community Wellbeing. *International Journal of Environmental Research and Public Health*, 23, 716.
- Richmond, C., Coombes, B., & Louis, R.P. (2024). *Because This Land Is Who We Are: Indigenous Practices of Environmental Repossession*. Bloomsbury Academic (open access).
- Greenwood, M., de Leeuw, S., Stout, R., Larstone, R., & Sutherland, J. (2023). Introduction to Determinants of First Nations, Inuit, and Métis Peoples' Health in Canada (selected sections).
- Big-Canoe, K., & Richmond, C.A.M. (2014). Anishinabe youth perceptions about community health: Toward environmental repossession.
- Spice, A. (2018). *Fighting Invasive Infrastructures: Indigenous Relations Against Pipelines*.
- Lee, A.M., & Freitas, V.M.P. (2025). Climate Change and the Lāhainā Wildfires: Raising Global Awareness as Native Hawaiians.
- Additional articles listed in the lecture schedule (Dearing & Cox 2018; Oleckno 2002; Martens 2002; Galea & Vlahov 2005; Kolahdooz et al. 2015; Wickramage et al. 2018).

Check the lecture schedule for readings to be completed prior to each class (the readings are the basis for lecture and lab discussion).

4. Course Objectives and Format

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

- Identify and define the main geographical concepts related to the study of environment and health;
- Select the appropriate concepts and methodologies for the study of the geography of health;
- Communicate your ideas clearly and concisely in both verbal and written form.

Course Structure

- History/concepts of (health) geography
- Geographical perspectives
- Epidemiology: understanding the literature
- Health research methods
- Health transition
- Indigenous health and the Indigenous determinants of health
- Land, environmental dispossession and environmental repossession
- Urban health; migration and health
- Environmental pollution, resource extraction and health
- Climate change, wildfires and health
- Emerging, re-emerging and neglected infectious diseases; knowledge translation and health care

Attendance is required. Lectures run weekly; labs run weekly in four staggered sections (see Section 6.2), so each student attends labs during one quarter of the term.

Course delivery: Most lectures are in person. By design, three lectures (Oct 5, Nov 16 and Dec 7) are delivered online/asynchronously through OWL Brightspace, with a recorded lecture and a structured learning activity posted by class time; complete these before the following week. One lecture (Nov 9) features an invited guest speaker. Delivery mode for each week is listed in the lecture schedule. Labs are TA-led throughout.

All course material will be posted to OWL Brightspace:

<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; 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 or contact the Western Technology Services Helpdesk at 519-661-3800 or ext. 83800.

5. Learning Outcomes

- Develop knowledge and critical understanding of the fundamental characteristics, processes, temporal changes and landscapes of social and biophysical systems and their interactions.
- Demonstrate informed awareness of geographical diversity through knowledge of different places and understanding of the processes that shape them spatially and over time.
- Explain the Indigenous determinants of health and the processes of environmental dispossession and environmental repossession as they shape the health of Indigenous Peoples in Canada and globally.
- Apply wholistic and relational understandings of Land, environment and health, including Indigenous knowledge systems, alongside biomedical and social models of health.

- Critically analyze how climate change, wildfires and resource extraction shape population health, and identify community-led and Indigenous-led responses.
- Combine breadth of knowledge of Geography with specialized understanding in selected sub-fields.
- Collect, analyze and interpret geographical and geo-spatial data in relation to social and biophysical systems.
- Communicate geographic ideas and understanding effectively to a variety of audiences in writing, orally, and graphically.

Geographical Skills

- Geographical data: statistical concepts, analysis and inference; quantitative and qualitative analysis; numerical and/or mathematical analysis; calculations; problem solving.

Generic Skills

- Literature and secondary data sources: information search and retrieval and synthesis of information sources and literature, annotated bibliographies.
- Critical and reflective reading, listening, thinking.
- Writing: education and practice in writing essays, reports, notebooks.

6. Course Content and Schedule

6.1. Lecture Schedule (Mondays, 10:30 am - 12:30 pm, FNB-1200)

Week	Date	Lecture Topic	Readings	Delivery
1	Sept 14	History/concepts of (health) geography	Chapter 1	In person
2	Sept 21	Geographical perspectives	Chapter 2	In person
3	Sept 28	Geographical perspectives (continued); diffusion of innovations	Dearing & Cox (2018); Lab Assignment issued (all sections)	In person
4	Oct 5	Epidemiologic designs/health research methods	Oleckno (2002); Chapters 3-4	Online/asynchronous
-	Oct 12	NO CLASS: Thanksgiving Holiday / Fall Reading Week (Oct 10-18)		
5	Oct 19	Health transition	Martens (2002)	In person
6	Oct 26	Mid-term test (in class)		In person
7	Nov 2	Indigenous health and the Indigenous determinants of health	Kolahdooz et al. (2015); Greenwood et al. (2023) Introduction	In person

8	Nov 9	Environmental pollution, resource extraction and health: environmental impacts of pipelines in BC	Chapter 12: 349-363; Spice (2018)	Guest lecture: Awasis (Cortney Goldcar Daikin)
9	Nov 16	Land, environmental dispossession and environmental repossession	Big-Canoe & Richmond (2014); Richmond, Coombes & Louis (2024) Introduction	Guest Lecture/ Online/asynchronous
10	Nov 23	Urban health; people on the move: migration and health	Chapter 10; Galea & Vlahov (2005); Wickramage et al. (2018)	In person
11	Nov 30	Climate change, wildfires and health (case study: Maui and the Lāhainā fires)	Chapter 12: 364-370; Carroll et al. (2026) Sitting by the Fire; Lee & Freitas (2025)	In person
12	Dec 7	Emerging, re-emerging and neglected infectious diseases; knowledge translation and course review	Chapter 13	Online/asynchronous (final class)

6.2. Lab (Tutorial) Schedule: Staggered Sections (Thursdays, 10:30 - 11:30 am)

To keep lab groups small and hands-on, the class is divided into four lab sections. Each section attends labs for one quarter of the term and completes the Lab Assignment on a staggered timeline. You attend labs only during your section's weeks; section lists will be posted on OWL in Week 1. All four sections complete the same lab sequence and the same Lab Assignment, marked with the same rubric. Labs are TA-led. There are no labs in Week 1 (first lab: Thursday, Sept 17) or during Fall Reading Week (Oct 15).

Lab Section	Lab Dates (Thursdays)	Lab Assignment Due
Section 1	Sept 17, Sept 24, Oct 1	Thursday, Oct 22
Section 2	Oct 8, Oct 22, Oct 29	Thursday, Nov 12
Section 3	Nov 5, Nov 12, Nov 19	Thursday, Dec 3
Section 4	Nov 26, Dec 3 (Lab 1 completed asynchronously on OWL the week of Nov 16)	Wednesday, Dec 9 (last day of classes)

Each section's three-lab sequence:

- Lab 1 - Orientation and data: introduction to the Lab Assignment, data sources and geo-spatial tools; is there a role of "place" in health research?

- Lab 2 - Methods work session: applying quantitative and qualitative methods to your Lab Assignment topic, with TA support.
- Lab 3 - Analysis and peer feedback: interpreting and communicating results; peer review of draft work before submission.

Note: Sections 1-3 attend three in-person labs. Section 4 completes Lab 1 (orientation and data) as an asynchronous OWL module during the week of Nov 16, then attends Labs 2 and 3 in person on Nov 26 and Dec 3. Section 2 spans the Reading Week break. Students who cannot attend their assigned quarter for documented reasons may request a section change in Week 1.

7. Communication

- Students should check the OWL site every 24-48 hours.
- A weekly update will be provided on the OWL announcements.
- Students should email their instructor(s) and teaching assistant(s) using OWL "messages".
- 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 their official university address is attended to in a timely manner.
- Emails will be monitored daily; students will receive a response in 24-48 hours.
- This course will use the OWL forum for discussions. Students should post all course-related content on the discussion forum so that everyone can access answers to questions.
- The discussion forums will be monitored daily by instructors or teaching assistants.

8. Evaluation

Evaluation Components	Format	Percentage of Course Grade	Assignment Schedule*
Lab Assignment (staggered)	Written report	15%	Due by section (see 6.2)
Assignment 2	TBA	15%	Due Dec 3 (all sections)
Mid-term test	Mixed	25%	October 26†
Participation	Lecture and lab attendance	5%	-
Final exam	Mixed	40%	TBA‡

*All assignments where required are due at 11:55 pm EST unless otherwise specified. For late assignments 10% will be deducted per day. Because Lab Assignment due dates are

staggered by section, each student's due date is the one listed for their assigned section; the assessment is identical across sections and marked with the same rubric.

†Please see mid-term make-up dates at the end of the course outline. ‡Please see final exam make-up dates at the end of the course outline.

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. Rubrics will be used to evaluate assessments and will be posted with the instructions.

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.

University-wide grade descriptors: A+ 90-100; A 80-89; B 70-79; C 60-69; D 50-59; F below 50.

Information about late or missed evaluations: Late assessments without illness self-reports will be subject to a late penalty of 10%/day. Late assessments with illness self-reports should be submitted within 24 hours of submission of the last illness self-report. A make-up test will be offered.

Grades will not be adjusted on the basis of need. It is important to monitor your performance in the course. Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department.

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. See the policy on Academic Accommodation for Students with Disabilities.

University policy on academic considerations requires that all requests for academic considerations be accompanied by a self-attestation. Students are permitted one academic consideration request per course per term without supporting documentation. Supporting documentation is always required for academic consideration requests for examinations scheduled by the Office of the Registrar and for the assessment designated below. Any academic considerations granted in this course will be determined by the instructor, in consultation with the academic advisors in your Faculty of Registration.

Formal Documentation Designation statement: Mid-term test (25%), October 26.

Flexibility statement: Because the submission deadlines for assessments already include flexibility, the instructor reserves the right to deny academic consideration for assignments submitted following the end of the period of flexibility. Students unable to attend their assigned lab quarter for documented reasons should contact the instructor in Week 1 to arrange a section change rather than requesting consideration after the fact.

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 (one week for a mid-term).

10. Make-up Examinations

A Special 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 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.

11. Use of Electronic Devices

During lectures and labs, please turn off electronic devices unless they are being used for course-related activities. No electronic devices will be allowed during tests and examinations.

12. How to Be Successful in this Class

- Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term, including your lab section's dates, and schedule time at the start of each week to get organized.
- Make it a daily habit to log onto OWL to ensure you have seen everything posted.
- Follow weekly checklists created on OWL or create your own to help you stay on track.
- Take notes as you go through the lesson material.
- Connect with others. Try forming a study group and meeting on a weekly basis for study and peer support.
- 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).
- Reward yourself for successes.

13. Use of Generative Artificial Intelligence (AI)

Please refer to: AI at Western and AI Do's & Don'ts. In this course, AI tools may support brainstorming, organization and editing, but all submitted analysis and writing must be your own, and AI may not be used to represent Indigenous knowledges or lived experiences. Disclose any AI assistance in a brief note on your assignments.

14. 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 (Turnitin.com). Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity

review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

15. 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 any other arrangements to make this course more accessible to you. You may also contact Accessible Education at 519-661-2147.

16. Mental Health

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

17. Support Services

Western's Support Services; Student Development Centre; Indigenous Student Centre (indigenous.uwo.ca).

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. Information about support services for survivors, including emergency contacts, is available 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.

18. Important Dates

- September 9: Fall term classes begin
- Mid-September (see Registrar): Last day to add a first-term half course
- September 30: National Day for Truth and Reconciliation (non-instructional day)
- October 10-18: Fall Reading Week (includes Thanksgiving, October 12)
- Late November/early December (see Registrar): Last day to drop a first-term half course without penalty
- December 9: Classes end
- Study day(s) and examination period: TBC (see Registrar)
- Makeup dates: TBA