**Fall 2022**

**Health, Environment, and Society (GEOG 3206F)**

**Department of Geography and Environmental Studies**

**Carleton University**

**Instructor:** Luke Struckman, PhD

**Office Hours:** via Zoom; by appointment

**E-mail:** lukestruckman@cunet.carleton.ca

**Lecture Location:** Tory Building 340

**Lecture Time:**  Wednesdays: 11:35 - 14:25

**TAs:**

Teresa Van Den Boogard: teresavandenboogaard@cmail.carleton.ca

**I. Course description**:

This course focuses on the geographic aspects of health and disease. It will survey the field of health geography by examining human/environment relationships and the impacts these relationships have on public health. Throughout the term, we will use geographical concepts and geographical research methodologies to examine a number of health-related issues. A geographical approach to health is multi-faceted and addresses epidemiological, ecological, social, and spatial determinants of health. Health geography is interdisciplinary and incorporates concepts and methodologies from a broad range of academic disciplines. The course addresses topics and issues using Canadian and international case studies.

**II. Prerequisites:**

Third year standing or permission of the Department of Geography and Environmental Studies

**III. Texts:**

Emch, M., E. Root, and M. Carrel 2017. Health and Medical Geography: Fourth Edition. New York: Guilford Press. (Abbreviated as "ERC" in the course schedule)

E-book available for student use **- free of cost -** from MacOdrum Library

Other readings are available through Brightspace or are freely available on the Internet.

**IV. Readings, Mixed Media, and Assignments:**

Readings, documentaries/videos/recordings, and assignments are designed to complement each other in meeting course objectives. Required readings establish the overall theme for each class and introduce key concepts and issues. Films and other media apply course concepts to case studies. Other activities allow for further reflection and research on course themes and case studies.

**V. Evaluation:**

**-Essays (60%)**

Two essays will allow students to engage with key course themes and connect key themes to social, spatial, and/or environmental determinants of health.

**-Mid-term Exam (15%)**

Administered via Brightspace; no in-class attendance required on October 12. Students MUST take the mid-term exam during scheduled class time.

**-Final Exam (25%)**Administered via Brightspace; no on-campus attendance required to complete final exam. Scheduled during formal exam period, December 10-22. Students MUST take the final exam during the scheduled final exam time.

**Grade Distribution**

Please note the grade distribution and important dates for assignments and exams

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| **Component** | **Important Dates** | **% of Final Grade** |
| 1. Essays 1 and 2 | September 28; November 16 | 60% |
| 3. Mid-term Exam | October 19 | 15% |
| 4. Final Exam | December 10-22 | 25% |
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Grades will be posted to Brightspace throughout the term. However, any grades posted to Brightspace are unofficial and will not be finalized until the end of the term.

In accordance with FASS Grading Guidelines:

"Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean."

If, for any reason, the final exam must be deferred due to a documented illness or a family emergency, the deferred final exam will be identical in format and coverage with the final it is replacing. **Deferred finals, which must be applied for at the Registrar’s Office, are available ONLY if the student is in good standing in the course.**

**VII.**  **PLAGIARISM**

The University Senate defines plagiarism as “*presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one’s own.”* This can include:

- reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source;

- submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;

- using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment;

- using another’s data or research findings;

- failing to acknowledge sources through the use of proper citations when using another’s works and/or failing to use quotation marks;

Plagiarism is a serious offence that cannot be resolved directly by the course’s instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F" for the course.

For further information on plagiarism, please see [Carleton University’s Academic Integrity Policy](https://carleton.ca/secretariat/wp-content/uploads/Academic-Integrity-Policy-2021.pdf).

**VIII. Requests for Academic Accommodations**

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| **Academic Accommodation** You may need special arrangements to meet your academic obligations during the term. You can visit the Equity Services website to view the policies and to obtain more detailed information on academic accommodation at <http://www.carleton.ca/equity/>. For an accommodation request the processes are as follows: **Pregnancy obligation**: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. **Religious obligation**: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. **Academic Accommodations for Students with Disabilities**: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable) at <http://carleton.ca/pmc/students/dates-and-deadlines/> |

**Course Schedule and Readings**

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Week 1 - September 07**

 **Introduction**

 ERC: Chapter 1 (pp. 1-9; 17-24)

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**Week 2 - September 14**

 **Ecologies of Disease and Research Methodologies I**

 ERC: Chapter 2 (pp. 29-54)
 **Article:** [Cholera: Frequently Asked Questions](https://www.cdc.gov/cholera/general/index.html)
 **Article:** [Turning the Tide Against Cholera](https://www.nytimes.com/2017/02/06/health/cholera-vaccine-bangladesh.html)

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Week 3 - September 21**

 **Ecologies of Disease and Research Methodologies II
 Video:** [Eradicating the Guinea Worm: Kelly Callahan](https://www.youtube.com/watch?v=0BYK-huptmk)ERC: Chapter 3 (pp. 76-91; 118-120 (section on the **precautionary principle**))
 **Article:** [The End Of Guinea Worm Was Just Around the Corner. Not Anymore](https://www.tspr.org/post/end-guinea-worm-was-just-around-corner-not-anymore)

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Week 4 - September 28**

 **Health and Uneven Development: Global and Regional Patterns**
 **Video:** [The World's Shrinking Problem](https://www.tvo.org/video/the-worlds-shrinking-problem) (00:00:00 to 00:15:00)
 ERC: Chapter 4 (pp. 129-165)

 **Essay 1 (Disease Eradication) due @23:55**

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**Week 5 - October 5**

 **Disease Diffusion**

 ERC: Chapter 6 (pp. 219-239)

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**Week 6 - October 12**

 **Emerging Infectious Diseases**

 ERC: Chapter 7 (pp. 254-269)

 **Video:** [Dengue: The Hunt for a Vaccine](https://www.youtube.com/watch?v=xnPK8vPNMfY) (00:00:00 – 00:15:00)

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**Week 7 - October 19**

 **Mid-term Exam**  **Internet-based**; no on-campus attendance required in Week 7.
 Students MUST take the mid-term exam during scheduled class time.

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**October 26 - Fall Break: NO CLASS**

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**Week 8 - November 02

 COVID-19: Responses and Uneven Impacts**

**Article:** [How Senegal Set the Standard on COVID-19](https://www.devex.com/news/how-senegal-has-set-the-standard-on-covid-19-98266)

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Week 9 - November 09**

 **Tick and Mosquito Borne Diseases**

 Article: [Lyme disease transmission](https://www.cdc.gov/lyme/transmission/index.html)
 Article: [Why is the CDC concerned about Lyme disease?](https://www.cdc.gov/lyme/why-is-cdc-concerned-about-lyme-disease.html)

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**Week 10 - November 16**

 **Geographies of Antimicrobial Resistance**

 **Article**: [Crisis Looms in Antibiotics as Drug Makers Go Bankrupt](https://www.nytimes.com/2019/12/25/health/antibiotics-new-resistance.html)
 **Video:** [Bacteria and Antibiotics: Revenge of the Microbes](https://www.youtube.com/watch?v=nmGaq9DsUfo)

 **Essay 2 (Antibiotic Resistance) due @ 23:55**

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Week 11 - November 23**

 **Health Care Access**
 ERC: Chapter 13 (pp. 453 - 468 ONLY)

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**Week 12 - November 30**

 **Health and the Environment: Environmental Racism**

 **Article:** [What is environmental racism?](https://www.weforum.org/agenda/2020/07/what-is-environmental-racism-pollution-covid-systemic/)

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Week 13 - December 7**

 **Food, Diet, and Nutrition: Biotechnology and Global Health** ERC: Chapter 8 (pp. 289-307)

 **Optional Reading:**

 Moseley, W.G. 2017. A risky solution for the wrong problem: Why GMOs won't feed the hungry of the world. *The Geographical Review* 107(4): 578–583.

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**Final Exam: December 10-22**

 **Internet-based**; no on-campus attendance required to complete the final exam.
 Students MUST take the final exam during the scheduled final exam time.