

Health Geography (GEOG-256) - Fall 2023

MWF 10:50-11:50 am, Carnegie 107

Instructor Information

Instructor

Eric D. Carter

Email

ecarter@macalester.edu

Office Hours and Location

Mon/Wed 1:10-4:00 pm in Carnegie 103

Preceptor/TA

Chloe Vasquez

Zippa Curiskis

Email

cvasquez@macalester.edu

zcuriski@macalester.edu

Office Hours and Location

TBA

TBA

General Information

Description

This course examines the geographical dimensions of health and disease, emphasizing global and domestic public health issues. Key approaches and themes include the human ecology approach to health; epidemiological mapping and spatial analysis; environmental health; the relationship among demographic change, economic development, and population health; the spatial diffusion of infectious diseases; the disease ecology approach to infectious and vector-borne diseases; and the challenges of "global health" in the 21st century, with special emphasis on "emerging infectious diseases." *This course counts for the Geography major, Community and Global Health Concentration, Social Science distribution requirement, and Internationalism Gen Ed requirement.*

Expectations and Goals

My main goal for this course is to make you fall in love with health geography. That's a pretty ambitious goal, and maybe "love" isn't quite the right word. But I want you to come away from this course convinced that the geographical lens has something important to offer for analyzing and solving important public health problems. Mainly this lens means looking at problems holistically, systemically, spatially, and politically: a "more-than-bioscientific" framework that helps us grapple with complexity and the diversity of people and places, in efforts to improve population health. What I expect from you, as learners, is simple. First, be open to being convinced of the virtues of the health geography approach. Second, come to class prepared, ready to engage with ideas, listen to others, discuss the readings, analyze problems, work on projects, and so forth. Ultimately the success of this class depends most on the collective energy of the students in it!

Course Materials

Required Materials

All readings for this course will be available electronically on Moodle.

Course Schedule

Preliminaries

Sept. 6 (WED) - Introductions and Course Business

Sept. 8 (FRI) - What is Health Geography?

Readings: Mukherjee, S. (2021, Feb. 22). "Why Does the Pandemic Seem to Be Hitting Some Countries Harder Than Others?" *The New Yorker*.

Activities: Brief lecture on the origins of the academic field of health geography and discussion of Mukherjee's article as an exemplar of thinking geographically about population health.

UNIT 1 - Development and Health in Global Perspective

Goal for this unit: a **data-rich policy brief on public health conditions in a specific country or region**. The deliverable is an **individual** paper, and you will have time to work in small groups in class to help prepare your report.

Sept. 11 (MON) - International Health by the Numbers

Reading: Interlandi, J. (2023, March 29). "The Lifesaving Power of ... Paperwork?" *New York Times Magazine*.

Resources for visualization and mapping: Gapminder.org, IHME GBD Compare, WHO Global Health Observatory

Activities: Using visualizations from resources above, we will discuss the meaning of key population health indicators, how they vary internationally, how health conditions have changed over time, and how health indicators correlate, or not, with economic development indicators. We should also discuss the importance of numbers and statistical analysis for making population health issues visible and to help guarantee everyone's right to a healthy life.

Sept. 13 (WED) - Demographic Transition Model

Readings:

- Roser, M. (2023). "[Demographic transition: Why is rapid population growth a temporary phenomenon?](https://ourworldindata.org/demographic-transition)" OurWorldInData.org.
- Johnson, S. (2021, Apr. 27). "How Humanity Gave Itself an Extra Life." *New York Times*.
- Forero, J. (2012, Dec. 29). Birth rate plummets in Brazil. *Washington Post*.

Activities: Together, we discuss the dynamics of the influential demographic transition model, how well the model applies to real-world circumstances, and consider what the model fails to consider.

Sept. 15 (FRI) - Policy Brief Work

Activities: Work in small groups to get started on policy briefs: focus on finding and evaluating sources.

Sept. 18 (MON) - Global Health Governance

Readings:

- Birn, A. E. (2014). Philanthrocapitalism, past and present: The Rockefeller Foundation, the Gates Foundation, and the setting (s) of the international/global health agenda. *Hypothesis*, 12(1), e8.
- Gostin, L. O., Moon, S., & Meier, B. M. (2020). Reimagining global health governance in the age of COVID-19. *American Journal of Public Health*, 110(11), 1615-1619.

Activities: Discussion of the structure, strengths and shortcomings of global health governance

Sept. 20 (WED) - Improving the Health of Women and Children in Rural Guatemala

Guest Lecture, Dr. Tricia Hall, of CCFC Guatemala

Sept. 22 (FRI) - Policy Brief Work

Activities: Work in small groups on policy briefs --- share work and peer review.

UNIT 2 - Geography and the Social Determinants of Health

Goal of this unit: A **group** project that presents a **causal argument, backed with evidence, about the social determinants of a specific public health issue** (see assignment for more details). As you work towards this project, you will engage with some key frameworks for social determinants of health (SDOH), understand the importance of having a framework for analysis, evaluate the quality of evidence in SDOH research, and use diagramming to sketch out and evaluate causal linkages.

Sept. 25 (MON) - Introduction to the Social Determinants of Health

Readings: Braveman, P., Egerter, S., & Williams, D. R. (2011). The social determinants of health: coming of age. *Annual Review of Public Health*, 32, 381-398.

Other resources: “Unnatural Causes: Place Matters” (video - watch before class)

Activities: Discussion focused on linking the concepts in SDOH (Braveman, et al.) to specific cases (from video).

Sept. 26 (TUES) - Unit 1 Assignment (Policy Brief) due by 5 pm

Sept. 27 (WED) - Place Effects on Health

Readings:

- Bambra, C. (2018). Where you live can kill you. *Routledge Handbook of Health Geography*.
- Klinenberg, E. (2002). *Heat wave: a social autopsy of disaster in Chicago*. University of Chicago Press (excerpt)

Other resources: RWJF, “[Life expectancy: could where you live influence how long you live?](#)” (interactive)

Activities: Small-group and whole class discussion to understand the “place effects” framework, with special focus on the distinction between “compositional” and “contextual” factors that influence health outcomes, using hypothetical and real-world examples.

Sept. 28 (THURS) - “Health Equity in Minnesota” Symposium (7-8:30 pm) - attendance mandatory

Sept. 29 (FRI) - Racial Disparities in Cardiovascular Health

Reading: Javed, Z., et al. (2022). Race, racism, and cardiovascular health: applying a social determinants of health framework to racial/ethnic disparities in cardiovascular disease. *Circulation: Cardiovascular Quality and Outcomes*, 15(1), e007917.

Activities: Guest lecture by Xing Gao '17, Postdoctoral Fellow at UC San Francisco

Oct. 2 (MON)

Readings: Skim through packet of SDOH diagrams; you should start research on your SDOH problem

Activities: SDOH diagramming activity. Take your prompt on the social determinants of a given health problem, and brainstorm by diagramming causal linkages. You can expect a small packet of readings on your group’s topic to get you started.

Oct. 4 (WED)

Readings: (your own research)

Activities: Continue discussion of the social determinants of health; today we will focus on evaluating the evidence for the causal linkages that comprise your model of the problem, as you worked out in the previous diagramming exercise.

Oct. 6 (FRI)

Readings: (your own research)

Activities: Continue discussion of the social determinants of health; definitely move towards the written product, and be prepared to briefly summarize your argument in front of the whole class.

UNIT 3 - Spatial Epidemiology (Disease Mapping)

Goal of this unit: you will **make your own map of health conditions for a given locale**, with explanatory text - your health map. This **individual** assignment is technology-neutral: you can use GIS software, online mapping tools, design software, or even non-digital tools (pencils, pens, markers). You will have to use actual public health data as the basis for your map, though, and it must be original (not just a copy of an existing map). In the first part of the unit, you'll be introduced to some design principles for disease mapping, problems of causal inference with mapping, and the use of basic GIS tools for analyzing a disease outbreak.

Oct. 9 (MON) - Principles of Cartography for Health Mapping

Readings: Anthamatten and Hazen (2020), "Cartography and Geospatial Science in Health" in *An Introduction to the Geography of Health*, 2nd ed.

Activities: Interactive lecture featuring rich visuals

Oct. 10 (TUES) - Unit 2 Assignment (SDOH paper) due by 5 pm

Oct. 11 (WED) - Spatial Analysis for Health: How and Why We Do It

Readings: TBA; a mix of GIS-based health geography papers and/or student projects from Health GIS course

Activities: Discussion

Oct. 13 (FRI) - GIS Lab Activity

Readings: Koch, *Disease Maps* (excerpt)

Activities: Meet in GIS Lab (Carnegie 108) for hands-on GIS activity, using data from the 1848 London cholera epidemic, made famous by the work of Dr. John Snow, one of the founders of epidemiology and medical geography.

Oct. 16 (MON) - Map Critique

Activities: Bring in a "health map" --- from a news story, academic article, or other source --- and be prepared to share and discuss its strengths and weaknesses with the class. As a class, we will evaluate and discuss the maps.

Oct. 18 (WED) - Map Making

Readings: (your own research)

Activities: Individual and group work on your health map

Oct. 20 (FRI) - Map Making

Readings: (your own research)

Activities: Individual and group work on your health map

UNIT 4 - Health and Environmental Justice

Goal of this unit: to **write an op-ed on an environmental justice issue**, in which you will advocate for more attention and/or funding and investment to be focused on specific communities that have been harmed by environmental injustice. You will need to do research and communicate in a way that appeals to a broad audience, including people who might not feel that environmental justice is very important. This is an **individual** paper, but you will need to cooperate on research and peer review, in and outside of class.

Oct. 23 (MON) - Mid-Course Interview activity

Oct. 24 (TUES) - Unit 3 Assignment (Health Map) due by 5 pm

Oct. 25 (WED) - Environmental Justice in a Global Perspective: The Problem of Electronic Waste

Readings: Ogunseitan, O. A. (2023). The Environmental Justice Agenda for E-Waste Management. *Environment*, 65(2), 15-25.

Activities: Watch documentary in class, "[Living In A Toxic Dumping Ground](#)" on health impacts of e-waste in Africa (attendance optional, but please watch video before the end of Fall Break)

Oct. 27 (FRI) - NO CLASS - FALL BREAK

Oct. 30 (MON) - Environmental Health: Who is Exposed and What are the Impacts?

Reading: Landrigan, P. J., et al. (2018). The Lancet Commission on pollution and health. *The Lancet*, 391(10119), 462-512.

Other resources: Environmental Justice Atlas ([EJAtlas.org](#))

Activities: Discussion, focused on these questions: What are the human health impacts of toxins in the environment? How certain is the science on human impacts of toxins in the environment? What is the geographical pattern of exposure to toxins?

Nov. 1 (WED) - Health and Environmental Justice

Readings:

- Johnston, J., & Cushing, L. (2020). Chemical exposures, health, and environmental justice in communities living on the fenceline of industry. *Current Environmental Health Reports*, 7, 48-57.
- Donley, N., et al. (2022). Pesticides and environmental injustice in the USA: root causes, current regulatory reinforcement and a path forward. *BMC Public Health*, 22(1), 1-23.

Activities: Discussion of readings (small-group or whole-class)

Nov. 3 (FRI) - Case Study: California EJ activism and policymaking

Readings:

- Perkins, T. E. (2022). "Kettleman City" in *Evolution of a Movement: Four Decades of California Environmental Justice Activism*. Univ of California Press.
- CalMatters (2022). "[Fighting for Justice in California's Polluted Places](#)." (3-part series)

Other resources: [CalEnviroScreen](#) 4.0 interactive map website

Activities: Using online maps to research progress on reducing pollution in California's "environmental justice communities."

Nov. 6 (MON) - Op-ed writing workshop

Activities: Discuss the keys to effective op-ed writing (other details, including readings, TBA)

Nov. 8 (WED) - Work on environmental justice op-ed

Readings: (your own research)

Activities: Work in pairs on your op-ed essay (collaborate on research and peer review)

Nov. 10 (FRI) - Work on environmental justice op-ed

Readings: (your own research)

Activities: Work in pairs on your op-ed essay

UNIT 5 - Disease Ecology (Infectious Disease and Environmental Change)

Goal of this unit: **A report evaluating the best interventions for a specific infectious or vector-borne disease.** The key is to consider how local contexts --- in cultural, economic, political, and environmental terms --- might shape the prospects of success of some interventions. Your report should also consider which programs or efforts did **not** work in the past, and why. Leading up to your work on the report, we will consider, again, how diagramming can be useful in understanding human-environmental dynamics, discuss the fundamentals of the disease ecology approach, center on neglected tropical diseases such as schistosomiasis or snakebite, as well as more widespread, endemic vector-borne diseases like Lyme disease, malaria, and dengue fever. This is a **group** project.

Nov. 13 (MON) - Introduction to Disease Ecology

Readings:

- Anthamatten and Hazen (2020). "Ecological Approaches to Human Health" in *An Introduction to the Geography of Health*, 2nd ed.
- The Economist (2023, August 26). "Ecology and Public Health: Carrion Call"

Activities:

- Interactive lecture on disease ecology

Nov. 14 (TUES) - Unit 4 Assignment (environmental justice op-ed) due by 5 pm

Nov. 15 (WED) - The Global Malaria Eradication Campaign and Why it Failed

Readings:

- Shah, S. (2011). "The Spray-Gun War" in *The Fever: How Malaria Has Ruled Humankind for 500,000 Years*.
- Cueto, M. (2005). Appropriation and resistance: Local responses to malaria eradication in Mexico, 1955-1970. *Journal of Latin American Studies*, 37(3), 533-559.

Activities: Discussion of why the global malaria eradication campaign (1950s-1960s) failed

Nov. 16 (THURS) - Prof. Carter Endowed Chair Lecture "In Pursuit of Health Equity: A History of Latin American Social Medicine," 4:45 pm-6:00 pm. Attendance semi-mandatory

Nov. 17 (FRI) - NO CLASS TODAY

Nov. 20 (MON) - Chloe Vasquez guest lecture on research on snakebite in Mexico

Reading: Cristino, J. S., et al. (2021). A painful journey to antivenom: The therapeutic itinerary of snakebite patients in the Brazilian Amazon (The QUALISnake Study). *PLOS Neglected Tropical Diseases*, 15(3), e0009245.

Activities: Chloe guest lecture, with time for Q & A. Assign diseases to groups for infectious disease paper.

Nov. 22 (WED) and Nov. 24 (FRI) - NO CLASS (THANKSGIVING)

Nov. 27 (MON) - Group work on infectious disease paper

Nov. 29 (WED) - Group work on infectious disease paper

Dec. 1 (FRI) - Brief presentations on your disease ecology project in class

UNIT 6 - Climate Change and Health.

Goal of this unit: A short essay, in direct response to the question: **Is climate change the biggest threat to global health in the 21st century?** This is an individual assignment.

Dec. 4 (MON) - Climate Change and Health: Extreme Heat in Urban Areas

Readings:

- Coffel, E., et al. (2018). Heat and Humidity Are a Killer Combination. *New York Times*, Oct. 11.
- Morrison, J. (2019). "Can We Turn Down the Temperature on Urban Heat Islands?" *Yale Environment 360*.
- Hsu, A., Sheriff, G., Chakraborty, T., & Manya, D. (2021). Disproportionate exposure to urban heat island intensity across major US cities. *Nature Communications*, 12(1), 2721.

Activities: In discussion, we'll consider heat stress as one "pathway" that links climate change to negative health outcomes. We will also consider questions of equity and justice, related to the political economy of urban areas (particularly), which places poorer, disadvantaged communities at greater risk of the worst outcomes of heat stress.

Dec. 5 (TUES) - Unit 5 Assignment (Disease ecology paper) due

Dec. 6 (WED) - Climate Change and Health: Infectious and Vector-Borne Disease

Readings:

- Parham, P. E., et al. (2015). Climate, environmental and socio-economic change: weighing up the balance in vector-borne disease transmission. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 370 (1665).
- McNeil, D. G. (2018, May 1). Tick and Mosquito Infections Spreading Rapidly, C.D.C. Finds. *New York Times*.
- St. Martin, V. (2023). Malaria Cases in Florida and Texas Raise Prospect of Greater Transmission in a Warmer Future. *Inside Climate News*.

Activities: No doubt, there is some link between global climate change and the distribution and intensity of vector-borne disease risk. In discussion, we'll focus on understanding the nature and degree of influence of global climate change on VBD risk, and how factors outside of the climate/environmental system might also influence VBD risk.

Dec. 8 (FRI) - Climate Change and Health: Understanding the Pathways

Readings: Haines, A., & Ebi, K. (2019). The imperative for climate action to protect health. *New England Journal of Medicine*, 380(3), 263-273.

Activities: In small-group discussion, we will draw on our previous experiences with creating causal diagrams to better diagnose a problem, in this case, focusing on the "exposure pathways" between climate change processes and health outcomes. In the process, we will also evaluate other, non-climate "drivers" of these health issues, which are usually political and socio-economic in character.

Dec. 11 (MON) - Climate change and Health

Readings: (your own research)

Activities: Individual and group work on your final paper. Also, time to fill out EOCs (end-of-course surveys)

Dec. 13 (WED) - Climate change and Health

Readings: (your own research)

Activities: Individual and group work on your final paper

Dec. 19 (MON) - Unit 6 Assignment due (during final exam period - note that this class does not have a final exam)

Assignments and Grading

Your grade for this course will be determined by six assignments, plus attendance and participation. Each assignment corresponds to one of the six units for the course; you will receive the assignment at the beginning of the unit, which usually lasts for about 3 weeks, and every reading and course activity helps you work towards the completion of the assignment. The six assignments are as follows:

	Unit	Assignment	Word Count (approx.)	Group or Individual?	Due Date
1	Development and Health in Global Perspective	Data-rich policy brief on public health conditions in a specific country or region.	800-1,000 (plus tables, figures, and references)	Individual	Sept. 26
2	Geography and the Social Determinants of Health	Develop a causal argument on the social determinants of a specific public health issue.	800-1,000 (plus tables, figures, and references)	Group	Oct. 10
3	Spatial Epidemiology (Disease Mapping)	Make your own health map	500 words of explanatory text, but the main deliverable is a graphic (map)	Individual	Oct. 24
4	Environmental Justice	Op-ed on an environmental justice question	~ 800 words (plus references)	Individual	Nov. 14
5	Disease Ecology	Report evaluating interventions for a specific infectious or vector-borne disease	800-1,000 (plus tables, figures, and references)	Group	Dec. 5
6	Climate Change and Health	Short essay to evaluate whether climate change the biggest threat to global health in the 21st century	500 words (plus references)	Individual	Dec. 19

Assignments are due by 5 pm on the given date; all submissions will be electronic (via Moodle).

Each assignment is worth 15 percent of your grade; together, these assignments are worth 90 percent of your course grade (6 x 15 = 90). The other 10 percent of your course grade comes from attendance and participation.

Note that there are no exams in this course.

Course Policies

Attendance and Participation

In this class, 10 percent of your grade derives from attendance and participation.

Attendance plays an essential role in learning, so you are warmly invited and expected to attend all class meetings. Attendance will be important not only for your learning, but also for our ability to build a community together and maintain a sense of connection and commitment to one another. Your presence in class matters. If you will not be in class for any reason, it is your responsibility to inform me in advance, or as early as possible, via email. It is also your responsibility to make up work you missed in your absence. Participation is distinct from attendance and is also an essential part of this course. In-class discussions, on-line discussion forums, responses to brief ungraded writing

assignments, quizzes, etc. will be factored into your participation grade. In general, "participation" means speaking up, sharing your thoughts, and making yourself noticed in positive, productive, and supportive ways. It also means listening carefully and respectfully to your fellow students. It is important to remember that we all have different styles of expression. If you have not been able to participate in a class discussion for any reason but want to demonstrate your active engagement, please send me an email after class with a comment or an idea you had that you would have liked to share, but were not able to during class. Students with any concerns, questions, or need for consideration for flexibility should connect with me as soon as possible to determine an appropriate plan.

Come Prepared!

Being part of this class means being prepared to participate fully in each day's activities. Those activities are spelled out clearly in the course outline and I'll be giving you frequent reminders about what we'll be doing in class on a given day. Please make sure to do the readings or consult other resources before class. The quality of in-class discussion and group work depends on your doing the assigned readings in advance. Do not be surprised if I call on you, unannounced, for your thoughts about an assigned reading. Only occasionally will class periods be taken up by lecture, and even then, you'll have a much better understanding of the material if you put in the work ahead of time.

Academic Integrity

As in every course, you will be expected to follow the college's policies on academic honesty: specifically, "Students are expected to maintain the highest standards of honesty in their college work. Forgery, cheating and plagiarism are serious offenses and students found guilty of any form of academic dishonesty are subject to disciplinary action." For more details, see the college's guidelines on Academic Integrity (link [here](#)).

Special Accommodations

If you have a physical or learning disability that will require special accommodations, please contact me to discuss arrangements. All conversations will be confidential. You will also need to meet with a representative from Disability Services, which determines accommodations. They can be contacted here: disabilityservices@macalester.edu .

Communication

You are welcome to come see me during my scheduled office hours. If you can't meet during those times, please send me an email or call my office and we'll schedule an appointment. In general, I answer emails within 24 hours. But I always prefer to discuss important matters in person, not electronically or by phone. Also, make sure that you check your email frequently, because I do send email messages - either from my own email address or via Moodle - frequently to the class.

Use of Electronic Devices in Class

Laptops are permitted in class but only for note-taking and for activities in class when specifically indicated. When we are having a lecture, discussion, student project presentation, or similar activity, I expect everyone's eyes and attention to be focused on that activity. You definitely should not be browsing the web, checking email, doing your homework, and so on during these class activities. The use of cell phones is strictly prohibited: no calling, texting or other uses of your cell phone during class time. I am only asking for three hours of your time each week to focus deeply on the course subject matter, so please consider the classroom to be a screen-free zone, unless we're using devices specifically for class activities.

Recording Policy

The Macalester College Classroom Recording (MCCR) policy sets forth community expectations regarding the recording (whether audio, video, or streaming) of class lectures, discussions, office hours, and other course-related activity. As an academic community, we value the free exchange of

ideas and the privacy of community members. We are also committed to providing appropriate accommodations to students who require recorded lectures as an academic adjustment for documented disabilities. The MCCR policy balances the legitimate uses of classroom recording, the intellectual property of the faculty, and the privacy of individual students and faculty. The entire policy can be found [here](#). In short, the policy requires students to submit a completed Student Recording Agreement to the appropriate office (Disability Services for students with approved accommodations; Academic Programs and Advising for all others) prior to engaging in any type of recording. The faculty member who signed the Recording Agreement (or is notified by Disability Services that recording will occur as an accommodation) is responsible for notifying the class that recording will be occurring. The required Student Agreement Recording form is available [here](#).

Religious Observance

Students may need to take part in religious observances that occur during the semester. If you have a religious observance/practice that conflicts with your participation in the course, please contact me before the end of the second week of the semester to discuss appropriate accommodations.

Health and Wellness

You are encouraged to make your health and well-being a priority throughout this semester and during your career at Macalester. Taking care of yourself will help you engage more fully in your academic experience. Remember that beyond being a student, you are a human being carrying your own experiences, thoughts, emotions, and identities with you. It is important to acknowledge any stressors you may be facing, which can be mental, emotional, physical, cultural, financial, etc., and how they can have an impact on your academic experience. I encourage you to remember that you have a body with needs. In the classroom, eat when you are hungry, drink water, use the restroom, and step out if you are upset and need some air. Please do what is necessary so long as it does not impede your or others' ability to be mentally and emotionally present in the course. Outside of the classroom, sleeping, moving your body, and connecting with others can be strategies to help you be resilient at Macalester. If you are having difficulties maintaining your well-being, please don't hesitate to contact me and/or find support from Health & Wellness Center. I have included contact information for health and wellness resources on the course Moodle page.

Inclusivity

I am committed to providing a safe and equitable learning environment that welcomes and supports everybody. As learners and teachers, we all bring various experiences and life contexts to this course. These differences will emerge in class and be part of what we negotiate and benefit from as a developing community. I acknowledge that academic institutions have evolved within a historical context that privileges certain students over others, and in this classroom, we will do our best to be aware of how these inequities may manifest. I hope you will feel comfortable coming to us to express any concerns or suggestions; this is an iterative process that requires the collaboration of all.

Late work

You must turn in your work on time. I will indicate due dates for every assignment, and you must respect them. Every student has one "free token" to use for turning in an assignment up to 48 hours late, for the whole semester. Otherwise, I will have to penalize you 10 percent of your grade (or a full letter grade) for a given assignment for every day that it is late. Tokens cannot be used for group projects, only for individual assignments. For other, extenuating circumstances (e.g. illness, accident, bereavement, religious observance, etc.), I will consider granting extensions on a case-by-case basis.

Turning in Assignments

I will be using electronic submission for most assignments. For a given assignment, I will create a "dropbox" on Moodle that has a specific time that work is due (and the dropbox then "closes"). Please do not submit assignments via email or as "shared" documents in Google Docs.

COURSE SCHEDULE AT-A-GLANCE (FALL 2023)

	Monday	Tuesday	Wednesday	Thursday	Friday
1	4 (SEPT) NO CLASS LABOR DAY	5	6 Introductions and Course Business	7	8 What is Health Geography?
2	11 UNIT 1 → International Health by the Numbers	12	13 Demographic Transition Model	14	15 Policy Brief Work
3	18 Global Health Governance	19	20 Guest Lecture: Tricia Hall (on health in Guatemala)	21	22 Policy Brief Work
4	25 UNIT 2 → Social Determinants of Health	26 Unit 1 assignment (policy brief) DUE	27 Place Effects on Health	28 Health Equity in Minnesota symposium	29 Guest Lecture: Xing Gao (Racial Disparities in Cardiovascular Health)
5	2 (OCT) SDOH diagramming activity	3	4 Work on SDOH paper	5	6 Work on SDOH paper
6	9 UNIT 3 → Principles of Cartography	10 Unit 2 assignment (SDOH paper) DUE	11 Spatial Analysis for Health	12	13 GIS Lab Activity
7	16 Map Critique	17	18 Map Making	19	20 Map Making
8	23 UNIT 4 → Mid-Course Interview	24 Unit 3 assignment (Health Map) DUE	25 EJ in Global Perspective (watch documentary)	26 NO CLASS FALL BREAK	27 NO CLASS FALL BREAK

9	30	31	1 (NOV)	2	3
	Environmental Health		Health and Environmental Justice		Case Study: EJ in California
10	6	7	8	9	10
	Op-ed writing workshop		Work on EJ op-ed in class		Work on EJ op-ed in class
11	13	14	15	16	17
	UNIT 5 → Disease Ecology	Unit 4 assignment (EJ op-ed) DUE	Global Malaria Eradication Campaign	Prof. Carter Endowed Chair lecture	NO CLASS TODAY
12	20	21	22	23	24
	Guest Lecture: Chloe Vasquez (snakebite in Mexico)		NO CLASS THANKSGIVING BREAK	NO CLASS THANKSGIVING BREAK	NO CLASS THANKSGIVING BREAK
13	27	28	29	30	1 (DEC)
	Group work on infectious disease report		Group work on infectious disease report		Presentations on infectious disease report
14	4	5	6	7	8
	UNIT 6 → Climate change and health: Extreme heat	Unit 5 assignment (infectious disease report) DUE	Climate change: infectious and vector-borne disease		Climate change and health: understanding the pathways
15	11	12	13	14	15
	Work on climate change papers; end-of-course surveys		Work on climate change papers	STUDY DAY	STUDY DAY
F I N A L S	18	19	20	21	22
		Unit 6 assignment (climate change and health) DUE			

Note: there is no final exam for this class; our last meeting as a class is Dec. 13