PBHL 4099: Capstone Experience in Public Health*

Spring 2022, Virtual

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Course Description

"Protecting Health, Saving Lives—Millions at a Time."

(motto, Johns Hopkins Bloomberg School of Public Health)

General Course Description - This course, being the last in the sequence for Public Health majors, is intended to pull together the ideas you have developed across the program and apply them as a composite strategy for understanding, explaining and proposing improvements for key dimensions of population health. Doing so will require that you collectively draw on the ideas developed separately in your courses on epidemiological, global, social, environmental and policy dimensions of public health. Moreover, rather than treating these as independent dimensions of health to be comprehensively covered in parallel, our purpose will be to synthesize, compare/contrast, and even "compete" across the ideas from each of these perspectives, where they intersect in particular health conditions.

Section Specific Detail - This course will meet 100% online, asynchronously. In this course, you will work in teams on a topic of your team's choosing. As such, you have the opportunity to select a substantial proportion of the content in this course. The success of our course will require that we each individually prepare every week and come together on Canvas to engage with course materials through questions, discussions, and applications of evidence.

Objectives

By the end of the course, participants will be able to:

- **Explain** the connections between epidemiological, global, social, environmental and policy dimensions for current concerns in population health.
- *Identify* similarities and differences across those five perspectives when applied to topics of your own interest.
- Work effectively in *groups* to understand, explain and seek potential improvements in public health challenges.
- **Write** more clearly than when you started this course.
- Clearly present (orally, visually, etc.) the complex interactions of public health issues to a generally knowledgeable scientific audience.

^{*} The structure of this course draws heavily on materials from the same course previously taught by Jennifer Boylan, Karen Lutfey, & Hyeyoung Oh Nelson.

Course Organization

There will be six main topics in our course. For the first of these, I will identify a public health issue, select articles, present, lead discussion, and provide activities for the rest of the class to complete. You should see this section of the course as a model of what your aims will be when your group is responsible for the course material. In addition to the public health topic in these early weeks, we will also devote some time to how to review the literature, give effective presentations, and allow time for groups to organize to collectively identify your own topics.

During the remaining weeks of the semester, each of the five student groups will, in turn be responsible for covering a topic of their own choosing. Each student will create course modules as part of a team project. The format of the modules is flexible—this may be a traditional slideshow presentation (e.g., PowerPoint, Prezi), videos (created or found online), podcasts (created or found online), infographics, or other activities. At least 80% of the material submitted must be self-produced (i.e., if the primary component is a video that lasts 15 minutes, no more than 3 minutes of that can be directly used from other sources). You will also need to moderate an online Discussion of the scientific peer-reviewed articles that you select for one of your team's weeks. Assessment criteria for the team project/individual modules is posted on Canvas. I strongly encourage teams to meet with me in the early stages of planning their projects.

Across both the readings *and* class presentation/discussion sessions, your group is responsible for being sure the topic is adequately covered from an epidemiological, global, social, environmental, *and* policy perspective. How you decide to divide that coverage, identify readings, formulate your presentation style(s), and facilitate discussion is up to the group, and should be determined in consultation with the instructor. In past iterations of the course it has been clear that organizing the content into separate sections for each of those five dimensions is detrimental to meeting the objectives of the course; I therefore *strongly* encourage your team to find a more compelling organization strategy.

Your group must discuss your proposed topic with me before it is considered "final." Topics will be assigned on a first come first-served basis, but must be settled no later than the date listed on the course outline.

Course Structure & Requirements

First and foremost, this course will be organized as an online seminar. This means that every student needs to actively participate every week--ask questions, challenge your class members, make connections to material from other courses, and relate the course material to your own experiences and research projects – from the various perspectives pertinent to understanding, explaining and seeking to improve these public health issues. Much of our reading for this course will be primary peer-reviewed research articles. At times the content of these will be over your head. This is to be expected. Your aim will not be to fully interpret the minutiae of every aspect of these readings, but to extract the key dimension(s) of public health they bring to bear on the topic at hand, and use those ideas to help the class formulate an informed discussion.

Given that this course is meeting entirely online asynchronously, it is imperative that we have clear expectations about timelines.

- For each week, I will plan to have all materials uploaded no later than midnight Sunday (Mountain time), the week they are to be covered (i.e., Week 2 materials will be available no later than Jan 23rd). Hopefully, I will be able to have them available earlier.
- For weeks when you are **NOT leading the module** all assignments (participation activities, reading responses) should be completed no later than 11:59pm Sunday the week *after* they have been posted (i.e., Week 3 submissions are due Feb 6th).
- For weeks when your group is leading the module, there are 2 separate deadlines:
 - Complete reading lists are due no later than 11:59pm Friday, 10 days before the module is scheduled (i.e., Week 6 reading list is due Feb 11th).
 - Complete module materials (including presentation and participation elements) are due no later than 11:59pm Monday, one week before the module is scheduled (i.e., Week 6 module materials are due Feb 14th).

Requirements

A. Class Participation Portfolio. (100 points, 20% of total grade):

Each week, there are multiple opportunities for participation. At two points during the semester, you will submit a portfolio of your 5 best participation activities (e.g., discussion posts, course activities). Each portfolio is worth 75 points. Your final grade will average your score from the two portfolios. In your portfolio, you will reflect on why you selected those posts/activities as evidence of your best work and self-evaluate how well you met the course requirements for participation activities. More details about the portfolios are available on Canvas. More details available in a handout on Canvas.

- B. Brief Response Papers (3 papers, 40 points each; 120 total, 24% of total grade)
 For 3 of the class modules, you will write a brief (~3 pages, double spaced) synopsis and critical analysis of the assigned readings. Detailed requirements for what critical analysis should entail is provided in a separate handout. One of these should be completed for the topic/articles I present from (Week 3 or 5), the other two you can select when to complete, however you cannot complete a response paper for the module when your group is presenting. Since you have multiple opportunities to select when to complete response papers, these should be completed on time (or you should opt to complete a different option). Late Response Papers will be deducted 25% if they are up to 24 hours late, 50% if 24-48 hours late, and will not be accepted if more than 48 hours late. There are exemplars of high quality versions of these papers from past course iterations on Canvas. More details available in a handout on Canvas.
- C. Group-Led Modules (2 modules, 75 points each; 150 total, 30% of total grade)

 The primary content of this course will be divided into 6 topically-based modules (each broken up into 2 parts). Part 1 will provide an overview of the explanation & understanding of the topic as it currently stands; Part 2 will explore potential intervention points to improve the public health topic selected. Each part should balance the five dimensions of public health (epidemiological, global, social, environmental, and policy) and how they intersect. Students will be assigned to groups (based on interests) that will be responsible for organizing (with instructor guidance)

one of these modules. Evaluation of these will primarily be based on your individual contributions, but elements of the group coordination will also be evaluated. The primary components of these modules are (Details of these components are elaborated in a separate handout on Canvas):

- 1. Selecting scholarly articles to cover the five dimensions of public regarding the selected topic. (Due 11:59pm, the Friday 10 days before the topic is to be covered)
- 2. Composing a class *presentation* activity to incorporate and apply the ideas from assigned readings. This should not just be a summary of the articles, but should also situate the readings in the wider literature, and apply the ideas from the reading in some way. (Due 11:59pm, the Monday 7 days before the topic is to be covered)
- 3. Create a student *participation* activity for non-group members to complete to engage with the readings and activities. (Due 11:59pm, the Monday 7 days before the topic is to be covered)

To ensure that I have ample time to post and your classmates have ample time to complete these activities, the due dates are deadlines, but I encourage you to submit these *early*. As such any module components will be deducted 25% if they are up to 24 hours late, 50% if 24-48 hours late, and will not be accepted if more than 48 hours late. NOTE: Some aspects of these deadlines are shifted ahead by 1 week for Group 5, part I & Group 1, part II (to avoid deadlines during Spring Break). See Due Dates on Canvas/Syllabus Schedule.

D. Final Paper (130 points, 26% of total grade):

Your final project for the class will be to synthesize any one of the (student selected) topics from this semester according to the key elements we've addressed. I.e., your aim will be to assess how each of the 5 dimensions (epidemiological, global, social, environmental and policy) informs public health's understanding, explanation and potential to improve population outcomes related to the chosen topic. To completely address these issues will require approximately 15 pages. These papers are to be written *individually*. You are *strongly encouraged, but not required*, to use the topic that your group presented on for this assignment. Final Papers are due by the end of our allotted final exam period (to Canvas by 5pm on May 11th). If late, final papers are deducted 10% per day, and will NOT be accepted after 5 days. More details available in a handout on Canvas.

Honors Requirements (if applicable):

If you are enrolled in the Honors section of this course, you will be responsible for the same requirements as outlined above, but will also be expected to extend your final paper in a few ways:

- A longer final synthesis paper (approximately 18 pages), which includes:
- the collection of some additional data beyond what is included in your group presentation for your topic (some examples include: interviews with key informants on the topic, proposing new research agenda items pertaining to the topic including a literature review identifying the pertinence of that question, extensions of service learning opportunities applicable to your topic, etc.).
- Making a final presentation to PBHL faculty/students at the end of the semester.

You need to meet with me to discuss how you will incorporate this extension into your final paper. This meeting must take place **no later than February 18**th. Honors students will not receive additional points for this work. Instead, it is graded on a pass/fail basis, and those who "pass" will qualify for honors at graduation.

Grading

Maximum Potential Points (500):								
Weekly Elements	220 (44%)	Group Elements	150 (30%)	Final Paper	130 (26%)			
Portfolio (mean)	(100 pts)	Module 1	(75 pts)					
Responses	(120 pts)	Module 2	(75 pts)					

Final Grade Computation:

Your final grade will be determined by summing the number of points earned from each of the above categories. Letter grades will be determined from your point total as follows:

Letter Grade	Points Range	Letter Grade	Points Range	<u>Letter Grade</u>	Points Range
Α	467+	В	415-437	С	365-387
A-	450-466	B-	400-414	C-	350-364
B+	438-449	C+	388-399	D	300-349

Any student accumulating 299 or fewer points will receive an F for the course.

Grading Expectations:

Participation, presentation, and paper grades you earn will reflect how thoroughly your work demonstrates the particular assignment requirements *and* overall course aims, which will correspond to the following sets of expectations:

- F Work that **fails to address** an assignment's **minimum requirements** will earn grades in the F range.
- D Work that **incompletely addresses** an assignment's **minimum requirements** will earn grades in the D range.
- C Work that **addresses only** an assignment's **minimum requirements** will earn grades in the C range.
- B Work that, in addition to meeting an assignment's minimum requirements, also occasionally reflects engagement with other material from the course where appropriate, in ways that meet course objectives will earn grades in the B range.
- A Work that, in addition to meeting an assignment's minimum requirements, also consistently reflects engagement with other material from the course where appropriate & in ways that exceed course objectives will earn grades in the A range.

Please note now that there are NO extra credit opportunities in this course. For this course to be successful, and therefore for you to be successful in this course, we need everyone keeping up with requirements throughout the semester.

Course and College Policies

A Note on Participation:

The topics of study in this course will at times touch on personal and/or controversial issues. Your thoughts and opinions in discussing these topics will be valued and respected. To foster this, the following ground rules will apply for all in-class *and* online interactions:

- 1- Be respectful of others and their opinions. While healthy debate will be constructive in the learning process, disrespectful or insulting contributions will not be tolerated.
- 2- The content of your expressed *opinions* will in no way affect your grade. You are encouraged to share your *thoughtful* opinions, beliefs and values openly. The class will particularly benefit from statements that support and/or challenge both those of other students and the instructor (as long as it is done in a manner consistent with rule #1).

Course Communication:

- <u>The Syllabus</u> has answers to the most common questions pertaining to the course. Be sure check the syllabus first, before asking me about due-dates, assignment requirements, etc.
- <u>Canvas</u> will be used for the majority of communication in this course. You can find a
 copy of the syllabus, additional assigned readings, and all assignments there. I will also
 post any lecture notes after each class. To make your experience in this course
 successful, you should expect to make this resource a *regular* part of your preparation
 for this course.
- <u>E-mail</u> should be used for quick communications (things that can be responded to in no more than a few sentences); use office hours for anything requiring more depth. You should only use your UCD email account for communication related to this course; I will not read/reply to emails from your personal accounts (e.g., Yahoo!, Hotmail, etc; it's because my email client will often filter these and I just won't even see them). Please consider e-mail as subject to the same standards of communication as you would all other forms written material in this course (i.e., you should use complete sentences, proper punctuation, etc.). I will typically respond to email within 48 hours. I will NOT, under any circumstances discuss grades over email.
- Office Hours are available to add to your experience in this course. Please make use of them. These are meant to supplement required course work and in-class elements. As such, while I am happy to discuss course materials or other aspects of public health/academia in general with you during this time, they should not be viewed as an opportunity to ask, "What did I miss in class?" (You should find peers in the class with whom you can share notes for that purpose.)

What I expect from you:

- **1** *Make a concerted effort to bring the best you can to the course.* This means doing readings, actively completing assignments, putting forth effort into the evaluated elements of the course. It also means taking ownership over the grades you earn.
- **2** *Treat others in the class with respect.* This includes simple norms of regular interaction (e.g., devoting appropriate attention to the materials provided by others) and thoughtfully

considering the contributions of others. At times we'll potentially cover material of a sensitive nature; being able to respect other's expressed opinions makes critical discourse possible.

What you can expect from me:

- **1** Make a concerted effort to bring the best I can to the course. This means leading a class appropriate to its level, selecting "up to date" material that helps illustrate the course's key aims, regularly being available for interaction within and (to a reasonable extent) outside the classroom, and adapting as is appropriate for the needs of the class.
- **2** Treat others in the class with respect. This includes being prepared for class, returning graded materials in a timely manner with useful feedback, striving to be impartial in the assessment of student work, while holding that work to the standards of the course and honors program. It also means fostering an environment where diverse perspectives can comfortably be shared in class.

What we all can expect from each other:

Behave in a manner reflecting common courtesies. Maintain professionalism & respect in all communication (e.g., email/Canvas messages).

Academic Dishonesty

This is a Capstone course. As such, standards of academic honesty should be abundantly clear to you by now. Any documented Academic Dishonesty will result in **failure for the course**. Don't risk it. Cite your sources, etc. Be sure you have read and understand the CLAS policy linked below. When in doubt, ask.

CLAS Academic Dishonesty Policy: Students are required to know, understand, and comply with the CU Denver Academic Dishonesty Policy as detailed in the Catalog and on the CLAS website. A university's reputation is built on a standing tradition of excellence and scholastic integrity. As members of the University of Colorado Denver academic community, faculty and students accept the responsibility to maintain the highest standards of intellectual honesty and ethical conduct. Academic dishonesty consists of plagiarism, cheating, fabrication and falsification, multiple submission of the same work, misuse of academic materials, and complicity in academic dishonesty. If you are not familiar with the definitions of these offenses, go to http://www.ucdenver.edu/academicDishonesty/Pages/Definition-of-Academic-Dishonesty.aspx.

Disability Services Information:

The University of Colorado Denver is committed to providing reasonable accommodation and access to programs and services to persons with disabilities. Students with disabilities who want academic accommodations must register with Disability Resources and Services (DRS) in Academic Building 1, #2116, Phone: 303-315-3510, Fax: 303-315-3515. Website: http://www.ucdenver.edu/student-services/resources/disability-resources-services/Pages/disability-resources-services.aspx. I will be happy to provide approved accommodations, once you provide me with a copy of DRS's letter.

Course Schedule

Schedule At a Glance

- Week 1 Introductions & Overview
- Week 2 Synthesizing research
- Weeks 3 & 5 COVID
- Week 4 Group Meetings
- Weeks 6 & 11 Group 1, topic TBD
- Weeks 7 & 12 Group 2, topic TBD
- Weeks 8 & 13 Group 3, topic TBD
- Weeks 9 & 14 Group 4, topic TBD
- Weeks 10 & 15 Group 5, topic TBD

Detailed Schedule

NOTE – All assigned readings are posted to Canvas, and this schedule will be updated regularly.

→ Week 1 (Jan 18-21) – Introduction & Course Overview (adams)

Required Readings

- Syllabus
- Orient to Canvas

Assignments

- **ALL STUDENTS** Brief Surveys
 - Introduction Discussion Board
 - Technology
 - Expectations
 - Topic Interests (available for 2 weeks)

→ Week 2 (Jan 24-28) – Synthesizing Research (adams)

Required Readings

- Knopf, Jeffrey W. 2006. "Doing a Literature Review." *Political Science & Politics* 1:127-132.
- Calarco, Jessica. 2018. "Beyond the Abstract: Reading for Meaning in Academia."
 Blogpost. Retrieved on Jan 2, 2019 from http://www.jessicacalarco.com/tips-tricks/2018/9/2/beyond-the-abstract-reading-for-meaning-in-academia.

Assignments

- ALL STUDENTS Topic Interests Discussion Board
- **ALL STUDENTS** Complete *any three* of the following:
 - o Calarco reading Discussion Board
 - Knopf reading Discussion Board
 - Refining Keywords Activity
 - Citation Mining Activity

→ Week 3 (Jan 31 - Feb 4) - COVID-19, part I (adams)

Required Readings

- Buchwald AG, Bayham J, Adams J, et al. "Estimating the Impact of Statewide Policies to Reduce Spread of Severe Acute Respiratory Syndrome Coronavirus 2 in Real Time." Emerging Infectious Diseases. 2021;27(9):2312-2322.
- Clouston SAP, Nataleb G, Link B. Socioeconomic inequalities in the spread of coronavirus-19 in the United States: A examination of the emergence of social inequalities. *Social Science & Medicine*. 2021; 268:113554.
- Dowd JB, Andriano L, Brazel DM, et al. "Demographic science aids in understanding the spread and fatality rates of COVID-19." Proceedings of the National Academy of Sciences. 2020; 117 (18) 9696-9698
- Jassat W, Karim SA, Mudara C, et al. "Clinical Severity of COVID-19 Patients Admitted to Hospitals in Gauteng, South Africa During the Omicron-Dominant Fourth Wave."
 2021; pre-print available at SSRN: http://dx.doi.org/10.2139/ssrn.3996320
- Wang CC, Prather KA, Sznitman J, et al. "Airborne transmission of respiratory viruses." *Science*. 2021; 373(6558): eabd9149.

Assignments

- ALL GROUPS Topics Finalized by 11:59pm Feb 4th
- ALL STUDENTS Response Paper Option #1a due 11:59pm Feb 6th

→ Week 4 (Feb 7-11) – Facilitated Group Work Day

Useful Resources

• Module Creation Resources Document

Assignments

- **ALL GROUPS** Group Contract
- Group 1 Reading List for Part I, due 11:59pm, Feb 11th

→ Week 5 (Feb 14-18) – COVID-19, part II

Required Readings

- Li Y, Campbell H, Kulkarni D, et al. The temporal association of introducing and lifting non-pharmaceutical interventions with the time-varying reproduction number (R) of SARS-CoV-2: a modelling study across 131 countries. *The Lancet Infectious Diseases*. 2021; 21: 193–202.
- Zhang R, Li Y, Zhang AL, Wang Y, Molina MJ. Identifying airborne transmission as the dominant route for the spread of COVID-19. *PNAS*. 2020; 117(26): 14857–14863.
- Kavanagh MM, Gostin LO, Sunder M. Sharing Technology and Vaccine Doses to Address Global Vaccine Inequity and End the COVID-19 Pandemic. *JAMA*. 2021;326(3):219–220.
- Bajos N, Jusot F, Pailhé A, et al. When lockdown policies amplify social inequalities in COVID-19 infections: evidence from a cross-sectional population-based survey in France. BMC Public Health 2021; 21(705).
- Morawska L, Tang JW, Bahnfleth W, et al. How can airborne transmission of COVID-19 indoors be minimised? Environment International. 2020; 142:105832.

Assignments

- Group 1 Presentation & Participation Activities for Part I, due 11:59pm, Feb 14th
- Group 2 Reading List for Part I, due 11:59pm, Feb 18th
- ALL STUDENTS Response Paper Option #1b due 11:59pm Feb 20th

→ Week 6 (Feb 21-25) – Group 1, part I (topic TBD)

Required Readings

• tbd

Assignments

- Group 2 Presentation & Participation Activities for Part I, due 11:59pm, Feb 21st
- Group 3 Reading List for Part I, due 11:59pm, Feb 25th
- Groups 2-5 Response Paper Option #2 due 11:59pm Feb 27th

→ Week 7 (Feb 28 – Mar 4) – Group 2, part I (topic TBD)

Required Readings

tbd

Assignments

- Group 3 Presentation & Participation Activities for Part I, due 11:59pm, Feb 28th
- Group 4 Reading List for Part I, due 11:59pm, Mar 4th
- Groups 1, 3-5 Response Paper Option #3 due 11:59pm Mar 6th

→ Week 8 (Mar 7-11) – Group 3, part I (topic TBD)

Required Readings

• tbd

Assignments

- Group 4 Presentation & Participation Activities for Part I, due 11:59pm, Mar 7th
- Group 5 Reading List for Part I, due 11:59pm, Mar 11th
- Groups 1-2, 4-5 Response Paper Option #4 due 11:59pm Mar 13th

→ Week 9 (Mar 14-18) – Group 4, part I (topic TBD)

Required Readings

tbd

Assignments

- Group 5 Presentation & Participation Activities for Part I, due 11:59pm, Mar 14th
- Group 1 Reading List for Part II, due 11:59pm, Mar 18th
- Groups 1-3, 5 Response Paper Option #5 due 11:59pm Mar 20th

Spring Break (Mar 21-25)

→ Week 10 (Mar 28-Apr 1) – Group 5, part I (topic TBD)

Required Readings

tbd

Assignments

• **Group 1** – Presentation & Participation Activities for Part II, due 11:59pm, Mar 28th

- Group 2 Reading List for Part II, due 11:59pm, Apr 1st
- Groups 1-4 Response Paper Option #6 due 11:59pm Apr 3rd

→ Week 11 (Apr 4-8) – Group 1, part II (topic TBD)

Required Readings

• tbd

Assignments

- Group 2 Presentation & Participation Activities for Part II, due 11:59pm, Apr 4th
- Group 3 Reading List for Part II, due 11:59pm, Apr 8th
- Groups 2-5 Response Paper Option #7 due 11:59pm Apr 10th

→ Week 12 (Apr 11-15) – Group 2, part II (topic TBD)

Required Readings

tbd

Assignments

- Group 3 Presentation & Participation Activities for Part II, due 11:59pm, Apr 11th
- Group 4 Reading List for Part II, due 11:59pm, Apr 15th
- Groups 1, 3-5 Response Paper Option #8 due 11:59pm Apr 17th

→ Week 13 (Apr 18-22) – Group 3, part II (topic TBD)

Required Readings

• tbd

Assignments

- Group 4 Presentation & Participation Activities for Part II, due 11:59pm, Apr 18th
- Group 5 Reading List for Part II, due 11:59pm, Apr 22nd
- Groups 1-2, 4-5 Response Paper Option #9 due 11:59pm Apr 24th

→ Week 14 (Apr 25-29) – Group 4, part II (topic TBD)

Required Readings

• tbd

Assignments

- Group 5 Presentation & Participation Activities for Part II, due 11:59pm, Apr 25th
- Groups 1-3, 5 Response Paper Option #10 due 11:59pm May 1st

→ Week 15 (May 2-6) – Group 5, part II (topic TBD)

Required Readings

• tbd

Assignments

• Groups 1-4 – Response Paper Option #11 due 11:59pm May 8th

Final Paper Due May 11, 5pm MDT