

Term Information

Effective Term Summer 2023

General Information

Course Bulletin Listing/Subject Area Pub Hlth: Epidemiology
Fiscal Unit/Academic Org College of Public Health - D2505
College/Academic Group Public Health
Level/Career Undergraduate
Course Number/Catalog 3411
Course Title Public Health Field Investigation
Transcript Abbreviation PH Fld Invest
Course Description This course provides an applied study in investigating and responding to outbreaks, disasters, and other acute public health events.
Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week, 12 Week, 8 Week, 7 Week, 6 Week, 4 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? Yes
Is any section of the course offered 100% at a distance
Greater or equal to 50% at a distance
Grading Basis Letter Grade
Repeatable No
Course Components Lecture
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus, Lima, Mansfield, Marion, Newark, Wooster

Prerequisites and Exclusions

Prerequisites/Corequisites None
Exclusions
Electronically Enforced No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 26.1309
Subsidy Level Baccalaureate Course
Intended Rank Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors
Health and Well-being

Course Details

Course goals or learning objectives/outcomes

- Apply epidemiological study designs and measures of frequency and association to outbreak detection and investigation.
- Describe the steps of an outbreak investigation, the different types of outbreak patterns, and mitigation and control procedures for epidemics and pandemics
- Discuss mitigation and control procedures for outbreaks, epidemics, and pandemics.

Evaluate the influence of environmental, social, economic, microbiological, and immunological factors on the etiology and progression of acute public health events

- Design audience-appropriate communication related to an acute public health event using quantitative and qualitative data.

Content Topic List

- Defining Field Epidemiology
Conducting a Field Investigation
Collecting Data
Disease Outbreaks and Society
Describing Epidemiological Data, Analyzing Data
Developing Interventions; Communicating During an Outbreak or Public Health Investigation
- Multinational Outbreak Investigation; GIS Data
Exposures and Conditions of Acute Environmental Origin
Pandemics: Past and Present
Natural and Human-Made Disasters
Acute Enteric Disease Outbreaks
- Suspected Intentional Use of Biological & Toxic Agents
Public Health Emergencies and Society
No

Sought Concurrence

Attachments

- PUBHEPI 3411 Public Health Field Investigation DL.pdf: DL Syllabus
(Syllabus. Owner: Droesch, Kynthia Ellen)
- PUBHEPI 3411 Public Health Field Investigation HY.pdf: HY Syllabus
(Syllabus. Owner: Droesch, Kynthia Ellen)
- PUBHEPI 3411 submission-health-well-being.pdf: ge submission health and well-being theme
(GEC Course Assessment Plan. Owner: Droesch, Kynthia Ellen)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Droesch, Kynthia Ellen	11/23/2022 11:35 AM	Submitted for Approval
Approved	Anderson, Sarah Elizabeth	11/23/2022 02:10 PM	Unit Approval
Approved	Bisesi, Michael Salvatore	11/23/2022 02:41 PM	College Approval
Pending Approval	Cody, Emily Kathryn Jenkins, Mary Ellen Bigler Hanlin, Deborah Kay Hilty, Michael Vankeerbergen, Bernadette Chantal Steele, Rachel Lea	11/23/2022 02:41 PM	ASCCAO Approval



PUBHEPI 3411
Public Health Field Investigation
Distance Learning Option
Autumn Term 2023
3 Credit Hours

Instructor: TBA

Class Time and Location: Online, asynchronous class

Instructor's Office Hours: TBA

Course description: This course provides an applied study in investigating and responding to outbreaks, disasters, and other acute public health events. Students will gain skills in applying epidemiological principles and measures to identify and diagnose outbreaks, evaluating qualitative and quantitative evidence, understanding environmental and social factors affecting outbreak progression, and identifying potential control and prevention measures.

Prerequisites: None

Class Format

This class is an asynchronous course. Topics are divided into modules and each module will last either 1 or 2 weeks. *During most weeks*, the format will be: 1) two recorded lectures that are 20 minutes each, 2) other videos that supplement the recorded lectures; 3) short quizzes and assignments; 4) readings from an online text book, peer-reviewed literature, or government reports; and 5) small-group discussions.

Course Learning Objectives:

1. Apply epidemiological study designs and measures of frequency and association to outbreak detection and investigation.
2. Describe the steps of an outbreak investigation, the different types of outbreak patterns, and mitigation and control procedures for epidemics and pandemics.
3. Discuss mitigation and control procedures for outbreaks, epidemics, and pandemics.
4. Evaluate the influence of environmental, social, economic, microbiological, and immunological factors on the etiology and progression of acute public health events.
5. Design audience-appropriate communication related to an acute public health event using quantitative and qualitative data.

Competencies (see Final Page for further info)

BSPH Foundational (Core) Competencies

All students completing Introduction to Global Public Health will be prepared to:

2. Compare and contrast types of major domestic and international public health issues.
3. Discuss various approaches/strategies for identification, response and intervention to address and attempt to resolve common public health issues.
4. Identify genetic, social, political, cultural, behavioral, and socioeconomic factors related to global public health issues.
6. Communicate public health information, in both oral and written forms, through a variety of media and to diverse audiences.
7. Locate, use, evaluate and synthesize public health information.

Specialization Competencies for BSPH Majors

Public Health Sociology students will be prepared to:

1. Employ specific sociological theories, both classical and contemporary, to explain the unequal distribution of health among different subpopulations in the United States and throughout the world. Identify how these theories can extend our knowledge of disease processes and prevention and intervention opportunities beyond typical public health perspectives.
4. Identify social and public policies that differentially affect the unequal distribution of health in society as well as the social process that led to their creation and keep them in place.

Environmental Public Health students will be prepared to:

1. Apply principles of math, chemistry, biology to applied science of environmental public health.
3. Summarize management, technical measures and approaches to reduce and prevent disease.

CEPH Domains

1. The history and philosophy of public health as well as its core values, concepts and functions across the globe and in society
2. The basic concepts, methods and tools of public health data collection, use and analysis and why evidence-based approaches are an essential part of public health practice
3. The concepts of population health, and the basic processes, approaches and interventions that identify and address the major health-related needs and concerns of populations
4. The underlying science of human health and disease, including opportunities for promoting and protecting health across the lifecourse
5. The socioeconomic, behavioral, biological, environmental and other factors that impact human health and contribute to health disparities
9. Basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology

Aligned CEPH Cross-Cutting Concepts

1. Advocacy for protection and promotion of the public's health at all levels of society
2. Community dynamics
3. Critical thinking and creativity
4. Cultural contexts in which public health professionals work
5. Ethical decision making as related to self and society
9. Professionalism
10. Research methods
11. Systems thinking
12. Teamwork and leadership

GE Health and Wellbeing Theme

Goal 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

1.1 Engage in critical and logical thinking about the topic or idea of health and wellbeing.

1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of health and wellbeing.

Activities to achieve goal:

Students engage in critical and logical thinking about outbreak investigation and acute public health events through several assignments, including: frequent written reflections on the course content which require students to evaluate influential scholarship related to acute public health events; weekly quizzes that require the students to demonstrate understanding of key concepts and methods introduced in lectures and readings; and four exercises that allow the students to apply quantitative and qualitative epidemiologic methods to solve problems.

The textbook for this course provides information on the concepts and methods of field epidemiology, while the lectures and additional readings include specific examples of acute public health events and interventions, allowing students to explore the complexities and contextual factors of outbreaks and public health emergencies. Students also engage in advanced, in-depth, scholarly exploration through two major projects (the research paper and the press release). For the research paper, students select an acute public health event and evaluate how the event was investigated and controlled, as well as the environmental, social, economic, microbiological, and immunological factors that influenced the progression of the event, as well as interventions that either mitigated or exacerbated the event. For the press release, students design a short communication (via video, infographic, or other creative artifact), summarize the burden of the problem and report on at least one peer-reviewed article that presents an investigative or control measure.

Goal 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

2.1 Identify, describe, and synthesize approaches or experiences as they apply to health and wellbeing.

2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

Activities to achieve goal:

Students participate in small-group discussions about Acute Public Health Events and Society, in which they reflect on how outbreaks are represented in various art forms, including music, paintings, sculpture, short stories, books, and films. In these discussions, students are prompted to discuss the influence of acute public health events on society, as reflected in the arts throughout history. Another component of the course that meets this learning outcome is the eight “Investigate and Collaborate” discussions, in which students work in small groups to share a wide variety of reputable information sources related to outbreaks. These projects will allow them to draw from prior experience and other courses and to communicate those experiences with peers.

Students participate in frequent “Investigate and Collaborate” small-group discussions which require them to reflect on course material and what they have already learned or experienced, as well as what they still question or might need to learn. Students also produce a research paper and press release, which allow them to integrate newly acquired knowledge into creative and scholarly products. For both the research paper and press release, students participate in peer-review, which allows them to assess the work of classmates and reflect on and incorporate the feedback given to them by their peers.

Goal 3: Students will explore and analyze health and wellbeing through attention to at least two dimensions of wellbeing. (Ex: physical, mental, emotional, career, environmental, spiritual, intellectual, creative, financial, etc.).

3.1 Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.

3.2 Identify, reflect on, or apply strategies for promoting health and wellbeing.

Activities to achieve goal: The two dimensions that are the greatest focus in this class are physical and environmental health. The perspectives that are covered extensively scientific, historical and cultural.

Assignments that support this goal include reflections that will follow three modules (Disease Outbreaks and Society, Pandemics Past and Present, and Acute Public Health Events and Society) in which students consider and communicate social and scientific factors that influence the progression and mitigation of acute public health events. In addition, The Acute Public Health Events and Society Reflections enable students to explore health and wellbeing from a historical and cultural perspective and the Acute Public Health Event Press Release in which students design a short communication (via video, infographic, or other creative artifact). Students also participate in the "Investigate and Collaborate" discussions, in which they are the leader of the group two times throughout the semester. This activity allows them to choose (as leader) and reflect on (as group member) various sources of information that promote outbreak or acute public health event mitigations and control strategies.

Course Readings:

Required Readings:

The CDC Field Epidemiology Manual

Edited by Sonja A. Rasmussen and Richard A. Goodman

Available at: <https://www.cdc.gov/eis/field-epi-manual/chapters.html>

Reading for Book Club Discussion (see below for options)

Assigned readings and resources posted in Canvas

Assessment Components:

This course will include a variety of assessment components. Each is described briefly below; additional details will be provided for each assignment.

1. Quizzes and Assignments = 30%

- a. Every week, students will complete quizzes and assignments after listening to the recorded lectures (and videos) and reading the assigned materials. NOTE: Students will have 30 minutes to complete the quiz and each quiz will have 5-10 questions. ALL QUIZZES ARE OPEN-BOOK. OPEN-NOTES. HOWEVER, STUDENTS CAN NOT SPEAK TO ANYONE ABOUT THE QUIZ QUESTIONS.

2. Research Paper: Evaluation of an Acute Public Health Event = 25%

You will select an acute public health event from the list you are given by the instructor. Each student will research how the event was investigated and controlled. You will evaluate environmental, social, economic, microbiological, and immunological factors that influenced the progression of the event, as well as interventions that either mitigated or exacerbated the event. The deliverable will be a paper that

discusses the event with an understanding of epidemiological principles and methods. More details are provided on Carmen.

Peer review of the research paper will occur in small groups prior to the final submission.

3. Acute Public Health Event Press Release: Design and communicate evidence-based and audience-appropriate content = 20%

Using a different topic than your research paper, you will design a short communication (via video, infographic, or other creative artifact). You will need to summarize the burden of the problem and report on at least one peer-reviewed article that presents an investigative or control measure. More details are provided on Carmen, and examples are provided below.

a. Epi Data Brief ((Draft, Peer Review, Final):

- i. <https://www1.nyc.gov/site/doh/data/data-publications/epi-data-briefs-and-data-tables.page>
- ii. <https://www.nmhealth.org/data/view/brief/2033/>
- iii. <https://outbreaktools.ca/background/epidemiological-summaries/>

b. Press Release (Draft, Peer Review, Final):

- i. <https://www.apha.org/news-and-media/news-releases>
- ii. https://www.cdc.gov/chronicdisease/resources/press_room.htm
- iii. <https://www.who.int/teams/epi-win>

c. Situation Reports:

- i. <https://www.phe.gov/emergency/news/sitreps/Pages/default.aspx>

Peer review of the Acute Public Health Event Brief will occur in small groups prior to the final submission.

4. Acute Public Health Events and Society Reflections = 15%

Students will learn how outbreaks are reflected in various art forms, including music, paintings, sculpture, short stories, books, and films. Students will work in small groups to discuss the influence of acute public health events on society, as reflected in the arts.

- Book (students choose one):
 - *Epidemics and Society: From the Black Death to the Present* by Frank Snowden (2019)
 - *Necropolis: Disease, Power, and Capitalism in the Cotton Kingdom* by Kathryn Olivarius (2022)
- Music/Film (see Canvas for list of publicly available options provided via Kanopy and other sources):
 - *Ebola Outbreak 2014* from PBS Frontline
 - *How Black Death Reshaped Town and Field*
 - *Spillover: Zika, Ebola & Beyond - Attempting to Understand and Prevent Epidemics*
 - <https://www.pbs.org/newshour/arts/how-people-turned-pandemic-pain-into-song-across-history>
 - <https://www.chicagotribune.com/entertainment/music/ct-ent-coronavirus-songs-20200504-r4jdtacc2jakpoecfwqah3hzzu-story.html>
- Painting/sculpture: See Canvas for a list of options. Students will find a piece of art that represents an acute public health event and then write a one-page description and reflection of the piece of art.

5. Investigate and collaborate = 10%

You will be placed into small groups of 3-4 students for this assignment. Within 8 of the modules, there will be a Discussion Leader who will find a succinct source of quantitative or qualitative data about an acute public health event. The Discussion Leader will create a post on the DISCUSSION BOARD that includes the source of the data and a link to the source so that peers may review the same material.

The Discussion Leader will create a short video (2 minutes max) that briefly summarizes the data and answers all of the following questions: 1) How might an outbreak investigation team apply this data? 2) What other information would you like to know, now that you have reviewed the data provided? 3) What did you learn?

The other members of the group will respond to this post by crafting a short video response (2 minutes max) that includes at least two of the following elements: 1.) Comment – I agree with that, I disagree because...; 2.) Connection – I also thought...; 3.) Question – I wonder why...

Late submissions of assignments are strongly discouraged. Late assignments submitted after the due date are accepted for 24 hours past the due date with an automatic 50% deduction. Any late assignments submitted after 24 hours past the due date will not be graded.

Grading Scale:

A: 93 - 100 A-: 90 – 92.9
B+: 87 – 89.9 B: 83 – 86.9 B-: 80 – 82.9
C+: 77 – 79.9 C: 73 – 76.9 C-: 70 – 72.9
D+: 67 – 69.9 D: 60 – 66.9
E: < 60

Time Management

According to Ohio State policy (go.osu.edu/credithours), students should expect to spend a minimum of 3 hours per week on a course for each credit hour, thus for this 3-credit hour course you should expect to devote roughly 9 hours per week. Workload may vary from week to week. This is intended as a rough guide to help you plan your time accordingly. In a typical week, you can expect your time to be spent as follows:

- 2 hours – viewing lectures and TED talks/other videos
- 1 hour – interacting with small groups on discussion boards and peer review
- 0.5 hour - completing online quizzes
- 3 hours – assigned readings
- 2.5 hours – completing assignments

Class Technology

1. There is a Carmen site for the course, where students can find all readings and assignments. Assignments must be submitted through Carmen (carmen.osu.edu).
2. Flipgrid is a Microsoft tool that will be used to facilitate the book and movie discussions. Students can read about Flipgrid here: <https://info.flipgrid.com/>. Details on how to sign up and create videos will be included on Carmen, along with a short video example.

3. *Required equipment*

- a. Computer: current Mac (MacOs) or PC (Windows 10) with high-speed internet connection
- b. Webcam: built-in or external webcam, fully installed and tested
- c. Microphone: built-in laptop or tablet mic or external microphone
- d. Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Security Policies

OSU Information Technology's Security Policy can be found here:

<https://ocio.osu.edu/sites/default/files/assets/Policies/ITSecurity.pdf>.

Additional information about cyber security can be found here: <https://cybersecurity.osu.edu/about>.

OSU Learning Accessibility Policies

<https://keeplearning.osu.edu/> and <https://resourcecenter.odee.osu.edu>

<https://www.instructure.com/canvas/accessibility>

Technology support

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** ocio.osu.edu/help
- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu
- **TDD:** 614-688-8743

Office of Student Life: Disability Services

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office of Student Life: Disability Services at 614-292-3307 in Room 098 Baker Hall 113 W. 12th Ave. to coordinate reasonable accommodations for students with documented disabilities (<http://slds.osu.edu/>).

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Mental Health Services

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental

health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org.

Academic integrity

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University, the College of Public Health, and the Committee on Academic Misconduct (COAM) expect that all students have read and understood the University's Code of Student Conduct and the School's Student Handbook, and that all students will complete all academic and scholarly assignments with fairness and honesty. The Code of Student Conduct and other information on academic integrity and academic misconduct can be found at the COAM web pages (<https://oaa.osu.edu/academic-integrity-and-misconduct>). Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct, the Student Handbook, and in the syllabi for their courses may constitute "Academic Misconduct."

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Please note that the use of material from the Internet without appropriate acknowledgement and complete citation is plagiarism just as it would be if the source were printed material. Further examples are found in the Student Handbook. Ignorance of the Code of Student Conduct and the Student Handbook is never considered an "excuse" for academic misconduct.

If I suspect a student of academic misconduct in a course, I am obligated by University Rules to report these suspicions to the University's Committee on Academic Misconduct. If COAM determines that the student has violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in the course and suspension or dismissal from the University. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Child Care Access Means Parents in School Program

The Office of Diversity and Inclusion provides holistic support for qualifying student parents enrolled at Ohio State. To learn more, contact the "Child Care Access Means Parents in School" (CCAMPIS) Program at 614-247-7092/ lewis.40@osu or visit odi.osu.edu/ccampis

Health and Safety Requirements

Health and safety requirements: All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (<https://safeandhealthy.osu.edu>), which includes wearing a face mask in any indoor space and maintaining a safe physical distance at all times. Non-compliance will be warned first and disciplinary actions will be taken for repeated offenses.

Content/Assignments Aligned with Course Learning Outcomes

	Foundational and Specialization Competencies	CEPH Domains	CEPH Cross-Cutting Concepts	Course Learning Outcomes
Research Paper (Draft, Peer Review, Final)	2, 3, E-1, E-3, S-1	3, 4, 5	1, 10	2, 3, 4
Acute Public Health Event Press Release (Draft, Peer Review, Final)	6, E-3	3, 9	1, 3	5
Acute Public Health Events and Society Reflections/Discussion	4, S-1, S-4	5	4, 5	4
Investigate and Collaborate Discussions (8 weeks)	7	9	9, 11	1, 5
Quizzes and Assignments	2,	1, 2	1, 5	1, 3
Measures Assignment	E-1	2	2	1,
Module on "Intro to Epidemiologic Methods"		1, 3		

Course Outline

Week/ Module	Topics	Textbook Readings	Additional Materials	Assignments Due In Addition to Weekly Quizzes; *IC= Investigate and Collaborate
1	Defining Field Epidemiology; Introduction to Epidemiologic Principles	Ch 1	Principles of Epidemiology in Public Health Practice (Available at https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section1.html)	Canvas Familiarity and Syllabus Quiz
2	Initiating Operations; Conducting a Field Investigation	Ch 2, Ch 3	Roxby AC, Greninger AL, Hatfield KM, et al. Outbreak Investigation of COVID-19 Among Residents and Staff of an Independent and Assisted Living Community for Older Adults in Seattle, Washington. <i>JAMA Intern Med.</i> 2020;180(8):1101-1105. doi:10.1001/jamainternmed.2020.2233	Measures Exercise
3	Collecting Data; Technology for Data Collection and Management	Ch 4, Ch 5		Diagnosis Exercise; IC#1
4	Disease Outbreaks and Society		Piarroux R, Barrais R, Faucher B, Haus R, Piarroux M, Gaudart J, Magloire R, Raoult D. Understanding the cholera epidemic, Haiti. <i>Emerg Infect Dis.</i> 2011 Jul;17(7):1161-8. doi: 10.3201/eid1707.110059. PMID: 21762567; PMCID: PMC3381400.	Reflection Assignment; Press Release Draft
5	Describing Epidemiologic Data; Designing and Conducting Analytic Studies in the Field	Ch 6, Ch 7		Press Release Peer Review; IC#2
6	Analyzing and Interpreting Data; Collecting and Analyzing Qualitative Data	Ch 8, Ch 10		Book Club Discussion #1; IC#3
7	Developing Interventions; Communicating During an Outbreak or Public Health Investigation	Ch 11, Ch 12	Infodemics: https://www.who.int/health-topics/infodemic#tab=tab_1	IC#4
8	Multinational Outbreak Investigation; GIS Data	Ch 15, Ch 17	Global outbreak research: harmony not hegemony Akhvlediani, Tamuna et al. <i>The Lancet Infectious Diseases</i> , Volume 20, Issue 7, 770 - 772	Press Release Final Submission
9	Exposures and Conditions of Acute Environmental Origin	Ch 20		Book Club Discussion #2; CDC Exercise
10	Pandemics: past & present		Piret, J., Boivin, G. (2021) Pandemics Throughout History, <i>Frontiers in Microbiology.</i> 10.3389/fmicb.2020.631736	IC#5; Research Paper Draft
11	Natural and Human-Made Disasters	Ch 22	Watson JT, Gayer M, Connolly MA. Epidemics after natural disasters. <i>Emerg Infect Dis.</i> 2007 Jan;13(1):1-5. doi: 10.3201/eid1301.060779. PMID: 17370508; PMCID: PMC2725828. The Social Consequences of Disasters: Individual and Community Change Mariana Arcaya, Ethan J. Raker, Mary C. Waters <i>Annual Review of Sociology</i> 2020 46:1, 671-691	Research Paper Peer Review; IC#6
12	Acute Enteric Disease Outbreaks	Ch 23	https://www.cdc.gov/foodsafety/outbreaks/basics/epi-curves.html ; Foodborne Disease Outbreaks: Guidelines for Investigation and Control; available at: http://apps.who.int/iris/bitstream/handle/10665/43771/9789241547222_eng.pdf?sequence=1 ; Jacques-Antoine Hennekinne, Marie-Laure De Buyser, Sylviane Dragacci, Staphylococcus aureus and its food poisoning toxins: characterization and outbreak investigation, <i>FEMS Microbiology Reviews</i> , Volume 36, Issue 4, July 2012, Pages 815-836, https://doi.org/10.1111/j.1574-6976.2011.00311.x	IC#7; MMWR Exercise
13	Suspected Intentional Use of Biologic and Toxic Agents	Ch 24	Riedel S. Biological warfare and bioterrorism: a historical review. <i>Proc (Bayl Univ Med Cent).</i> 2004 Oct;17(4):400-6. doi: 10.1080/08998280.2004.11928002. PMID: 16200127; PMCID: PMC1200679.	IC#8; Research Paper Final Submission
14	Public Health Emergencies and Society		https://theconversation.com/how-3-prior-pandemics-triggered-massive-societal-shifts-146467 ; https://news.stanford.edu/2020/04/30/pandemics-catalyze-social-economic-change/	Book Club Discussion #3; APHE and Society Discussions and Reflections

*****Bold indicates Program Competencies, Domains, and Concepts aligned with this course.**

BSPH Foundational (Core) Competencies	BSPH – Environmental Public Health Specialization Competencies	BSPH – Public Health Sociology Specialization Competencies	CEPH Domains	CEPH Cross-Cutting Concepts
<p>1. Summarize the historic milestones in public health which have influenced current roles and responsibilities of current public health agencies, organizations and systems.</p> <p>2. Compare and contrast types of major domestic and international public health issues, including sources/causes of infectious/chronic diseases, transmission, risk factors, morbidity and mortality.</p> <p>3. Discuss various approaches/strategies for identification, response and intervention to address and attempt to resolve common public health issues.</p> <p>4. Identify genetic, social, political, cultural, behavioral, socioeconomic, demographic and ethical factors and relationships to domestic and international public health issues and determinants of health.</p> <p>5. Apply the fundamental principles of the five core disciplines of public health (biostatistics; environmental health; epidemiology; health administration/policy; health behavior/promotion) to domestic and international population health issues.</p> <p>6. Communicate public health information, in both oral and written forms, through a variety of media and to diverse audiences.</p> <p>7. Locate, use, evaluate and synthesize public health information.</p>	<p>1. Apply principles of math, chemistry, biology to applied science of environmental public health.</p> <p>2. Use the Environmental Science Health model to explain environmentally-related exposures and human diseases</p> <p>3. Summarize management, technical measures and approaches to reduce and prevent the disease.</p>	<p>1. Employ specific sociological theories, both classical and contemporary, to explain the unequal distribution of health among different subpopulations in the United States and throughout the world. Identify how these theories can extend our knowledge of disease processes and prevention and intervention opportunities beyond typical public health perspectives.</p> <p>2. Interpret population health patterns using rigorous methods of sociological inquiry that stem from both qualitative and quantitative reasoning, augmenting what public health researchers and practitioners typically use.</p> <p>3. Illustrate how sociological perspectives of stratification – particularly along the lines of race, class, and gender – expand typical public health perceptions and approaches</p> <p>4. Identify social and public policies that differentially affect the unequal distribution of health in society as well as the social process that led to their creation and keep them in place.</p>	<p>1. the history and philosophy of public health as well as its core values, concepts and functions across the globe and in society</p> <p>2. the basic concepts, methods and tools of public health data collection, use and analysis and why evidence-based approaches are an essential part of public health practice</p> <p>3. the concepts of population health, and the basic processes, approaches and interventions that identify and address the major health-related needs and concerns of populations</p> <p>4. the underlying science of human health and disease, including opportunities for promoting and protecting health across the life course</p> <p>5. the socioeconomic, behavioral, biological, environmental and other factors that impact human health and contribute to health disparities</p> <p>6. the fundamental concepts and features of project implementation, including planning, assessment and evaluation</p> <p>7. the fundamental characteristics and organizational structures of the US health system as well as the differences between systems in other countries</p> <p>8. basic concepts of legal, ethical, economic and regulatory dimensions of health care and public health policy and the roles, influences and responsibilities of the different agencies and branches of government</p> <p>9. basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology</p>	<p>1. advocacy for protection and promotion of the public’s health at all levels of society</p> <p>2. community dynamics</p> <p>3. critical thinking and creativity</p> <p>4. cultural contexts in which public health professionals work</p> <p>5. ethical decision making as related to self and society</p> <p>6. independent work and a personal work ethic</p> <p>7. networking</p> <p>8. organizational dynamics</p> <p>9. professionalism</p> <p>10. research methods</p> <p>11. systems thinking</p> <p>12. teamwork and leadership</p>



PUBHEPI 3411
Public Health Field Investigation
Autumn Term 2023
3 Credit Hours

Instructor: TBA

Class Time and Location: Tuesday, 4:10-5:30pm; ROOM TBD

Instructor's Office Hours: TBA

Course description: This course provides an applied study in investigating and responding to outbreaks, disasters, and other acute public health events. Students will gain skills in applying epidemiological principles and measures to identify and diagnose outbreaks, evaluating qualitative and quantitative evidence, understanding environmental and social factors affecting outbreak progression, and identifying potential control and prevention measures.

Prerequisites: None

Class Format

This course will consist of one synchronous session each week and asynchronous lectures, videos, readings, and quizzes. Prior to coming to class, students should listen to the recorded lectures and submit a summary of what they learned and questions for discussion prior to class (Monday at 11:59 PM). During class, we will discuss the topic of the week and a selected paper from the literature or a book. Each week, a module will open on Wednesday morning at 8:00 AM and close on the following Tuesday night at 11:59 PM.

Course Learning Objectives:

1. Apply epidemiological study designs and measures of frequency and association to outbreak detection and investigation.
2. Describe the steps of an outbreak investigation, the different types of outbreak patterns, and mitigation and control procedures for epidemics and pandemics.
3. Discuss mitigation and control procedures for outbreaks, epidemics, and pandemics.
4. Evaluate the influence of environmental, social, economic, microbiological, and immunological factors on the etiology and progression of acute public health events.
5. Design audience-appropriate communication related to an acute public health event using quantitative and qualitative data.

Competencies (see Final Page for further info)

BSPH Foundational (Core) Competencies

All students completing Introduction to Global Public Health will be prepared to:

2. Compare and contrast types of major domestic and international public health issues.
3. Discuss various approaches/strategies for identification, response and intervention to address and attempt to resolve common public health issues.

4. Identify genetic, social, political, cultural, behavioral, and socioeconomic factors related to global public health issues.
6. Communicate public health information, in both oral and written forms, through a variety of media and to diverse audiences.
7. Locate, use, evaluate and synthesize public health information.

Specialization Competencies for BSPH Majors

Public Health Sociology students will be prepared to:

1. Employ specific sociological theories, both classical and contemporary, to explain the unequal distribution of health among different subpopulations in the United States and throughout the world. Identify how these theories can extend our knowledge of disease processes and prevention and intervention opportunities beyond typical public health perspectives.
4. Identify social and public policies that differentially affect the unequal distribution of health in society as well as the social process that led to their creation and keep them in place.

Environmental Public Health students will be prepared to:

1. Apply principles of math, chemistry, biology to applied science of environmental public health.
3. Summarize management, technical measures and approaches to reduce and prevent disease.

CEPH Domains

1. The history and philosophy of public health as well as its core values, concepts and functions across the globe and in society
2. The basic concepts, methods and tools of public health data collection, use and analysis and why evidence-based approaches are an essential part of public health practice
3. The concepts of population health, and the basic processes, approaches and interventions that identify and address the major health-related needs and concerns of populations
4. The underlying science of human health and disease, including opportunities for promoting and protecting health across the lifecourse
5. The socioeconomic, behavioral, biological, environmental and other factors that impact human health and contribute to health disparities
9. Basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology

Aligned CEPH Cross-Cutting Concepts

1. Advocacy for protection and promotion of the public's health at all levels of society
2. Community dynamics
3. Critical thinking and creativity
4. Cultural contexts in which public health professionals work
5. Ethical decision making as related to self and society
9. Professionalism
10. Research methods
11. Systems thinking
12. Teamwork and leadership

GE Health and Wellbeing Theme

Goal 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

- 1.1 Engage in critical and logical thinking about the topic or idea of health and wellbeing.
- 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of health and wellbeing.

Activities to achieve goal:

Students engage in critical and logical thinking about outbreak investigation and acute public health events through several assignments, including: frequent written reflections on the course content which require students to evaluate influential scholarship related to acute public health events; weekly quizzes that require

the students to demonstrate understanding of key concepts and methods introduced in lectures and readings; and four exercises that allow the students to apply quantitative and qualitative epidemiologic methods to solve problems.

The textbook for this course provides information on the concepts and methods of field epidemiology, while the lectures and additional readings include specific examples of acute public health events and interventions, allowing students to explore the complexities and contextual factors of outbreaks and public health emergencies. Students also engage in advanced, in-depth, scholarly exploration through two major projects (the research paper and the press release). For the research paper, students select an acute public health event and evaluate how the event was investigated and controlled, as well as the environmental, social, economic, microbiological, and immunological factors that influenced the progression of the event, as well as interventions that either mitigated or exacerbated the event. For the press release, students design a short communication (via video, infographic, or other creative artifact), summarize the burden of the problem and report on at least one peer-reviewed article that presents an investigative or control measure.

Goal 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

- 2.1 Identify, describe, and synthesize approaches or experiences as they apply to health and wellbeing.
- 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

Activities to achieve goal:

Students participate in small-group discussions about Acute Public Health Events and Society, in which they reflect on how outbreaks are represented in various art forms, including music, paintings, sculpture, short stories, books, and films. In these discussions, students are prompted to discuss the influence of acute public health events on society, as reflected in the arts throughout history. Another component of the course that meets this learning outcome is the eight “Investigate and Collaborate” discussions, in which students work in small groups to share a wide variety of reputable information sources related to outbreaks. These projects will allow them to draw from prior experience and other courses and to communicate those experiences with peers.

Students participate in frequent “Investigate and Collaborate” small-group discussions which require them to reflect on course material and what they have already learned or experienced, as well as what they still question or might need to learn. Students also produce a research paper and press release, which allow them to integrate newly acquired knowledge into creative and scholarly products. For both the research paper and press release, students participate in peer-review, which allows them to assess the work of classmates and reflect on and incorporate the feedback given to them by their peers.

Goal 3: Students will explore and analyze health and wellbeing through attention to at least two dimensions of wellbeing. (Ex: physical, mental, emotional, career, environmental, spiritual, intellectual, creative, financial, etc.).

- 3.1 Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.
- 3.2 Identify, reflect on, or apply strategies for promoting health and wellbeing.

Activities to achieve goal: The two dimensions that are the greatest focus in this class are physical and environmental health. The perspectives that are covered extensively scientific, historical and cultural.

Assignments that support this goal include reflections that will follow three modules (Disease Outbreaks and Society, Pandemics Past and Present, and Acute Public Health Events and Society) in which students consider

and communicate social and scientific factors that influence the progression and mitigation of acute public health events. In addition, The Acute Public Health Events and Society Reflections enable students to explore health and wellbeing from a historical and cultural perspective and the Acute Public Health Event Press Release in which students design a short communication (via video, infographic, or other creative artifact). Students also participate in the "Investigate and Collaborate" discussions, in which they are the leader of the group two times throughout the semester. This activity allows them to choose (as leader) and reflect on (as group member) various sources of information that promote outbreak or acute public health event mitigations and control strategies.

Course Readings:

Required Readings: The CDC Field Epidemiology Manual
Edited by Sonja A. Rasmussen and Richard A. Goodman
Available at: <https://www.cdc.gov/eis/field-epi-manual/chapters.html>

Reading for Book Club Discussion (see below for options)

Assigned readings and resources posted in Canvas

Assessment Components:

This course will include a variety of assessment components. Each is described briefly below; additional details will be provided for each assignment.

1. Quizzes and Assignments = 30%
 - a. Every week, students will complete quizzes and assignments after listening to the recorded lectures (and videos) and reading the assigned materials. NOTE: Students will have 30 minutes to complete the quiz and each quiz will have 5-10 questions. ALL QUIZZES ARE OPEN-BOOK. OPEN-NOTES. HOWEVER, STUDENTS CAN NOT SPEAK TO ANYONE ABOUT THE QUIZ QUESTIONS.
2. Research Paper: Evaluation of an Acute Public Health Event = 25%

You will select an acute public health event from the list you are given by the instructor. Each student will research how the event was investigated and controlled. You will evaluate environmental, social, economic, microbiological, and immunological factors that influenced the progression of the event, as well as interventions that either mitigated or exacerbated the event. The deliverable will be a paper that discusses the event with an understanding of epidemiological principles and methods. More details are provided on Carmen.

Peer review of the research paper will occur in small groups prior to the final submission.
3. Acute Public Health Event Press Release: Design and communicate evidence-based and audience-appropriate content = 20%

Using a different topic than your research paper, you will design a short communication (via video, infographic, or other creative artifact). You will need to summarize the burden of the problem and report on at least one peer-reviewed article that presents an investigative or control measure. More details are provided on Carmen, and examples are provided below.

 - a. Epi Data Brief ((Draft, Peer Review, Final):

- i. <https://www1.nyc.gov/site/doh/data/data-publications/epi-data-briefs-and-data-tables.page>
 - ii. <https://www.nmhealth.org/data/view/brief/2033/>
 - iii. <https://outbreaktools.ca/background/epidemiological-summaries/>
- b. Press Release (Draft, Peer Review, Final):
- i. <https://www.apha.org/news-and-media/news-releases>
 - ii. https://www.cdc.gov/chronicdisease/resources/press_room.htm
 - iii. <https://www.who.int/teams/epi-win>
- c. Situation Reports:
- i. <https://www.phe.gov/emergency/news/sitreps/Pages/default.aspx>

Peer review of the Acute Public Health Event Brief will occur in small groups prior to the final submission.

4. Acute Public Health Events and Society Reflections = 15%

Students will learn how outbreaks are reflected in various art forms, including music, paintings, sculpture, short stories, books, and films. Students will work in small groups to discuss the influence of acute public health events on society, as reflected in the arts.

- Book (students choose one):
 - *Epidemics and Society: From the Black Death to the Present* by Frank Snowden (2019)
 - *Necropolis: Disease, Power, and Capitalism in the Cotton Kingdom* by Kathryn Olivarius (2022)
- Music/Film (see Canvas for list of publicly available options provided via Kanopy and other sources):
 - *Ebola Outbreak 2014* from PBS Frontline
 - *How Black Death Reshaped Town and Field*
 - *Spillover: Zika, Ebola & Beyond - Attempting to Understand and Prevent Epidemics*
 - <https://www.pbs.org/newshour/arts/how-people-turned-pandemic-pain-into-song-across-history>
 - <https://www.chicagotribune.com/entertainment/music/ct-ent-coronavirus-songs-20200504-r4jdtacc2jakpoecfwqah3hzzu-story.html>
- Painting/sculpture: See Canvas for a list of options. Students will find a piece of art that represents an acute public health event and then write a one-page description and reflection of the piece of art.

5. Investigate and collaborate = 10%

You will be placed into small groups of 3-4 students for this assignment. Within 8 of the modules, there will be a Discussion Leader who will find a succinct source of quantitative or qualitative data about an acute public health event. The Discussion Leader will create a post on the DISCUSSION BOARD that includes the source of the data and a link to the source so that peers may review the same material.

The Discussion Leader will create a short video (2 minutes max) that briefly summarizes the data and answers all of the following questions: 1) How might an outbreak investigation team apply this data? 2) What other information would you like to know, now that you have reviewed the data provided? 3) What did you learn?

The other members of the group will respond to this post by crafting a short video response (2 minutes max) that includes at least two of the following elements: 1.) Comment – I agree with that, I disagree because...; 2.) Connection – I also thought...; 3.) Question – I wonder why...

Late submissions of assignments are strongly discouraged. Late assignments submitted after the due date are accepted for 24 hours past the due date with an automatic 50% deduction. Any late assignments submitted after 24 hours past the due date will not be graded.

Grading Scale:

A: 93 - 100 A-: 90 – 92.9
B+: 87 – 89.9 B: 83 – 86.9 B-: 80 – 82.9
C+: 77 – 79.9 C: 73 – 76.9 C-: 70 – 72.9
D+: 67 – 69.9 D: 60 – 66.9
E: < 60

Time Management

According to Ohio State policy (go.osu.edu/credithours), students should expect to spend a minimum of 3 hours per week on a course for each credit hour, thus for this 3-credit hour course you should expect to devote roughly 9 hours per week. Workload may vary from week to week. This is intended as a rough guide to help you plan your time accordingly. In a typical week, you can expect your time to be spent as follows:

- 2 hours – viewing lectures and TED talks/other videos
- 1 hour – interacting with small groups on discussion boards and peer review
- 0.5 hour - completing online quizzes
- 3 hours – assigned readings
- 2.5 hours – completing assignments

Class Technology

1. There is a Carmen site for the course, where students can find all readings and assignments. Assignments must be submitted through Carmen (carmen.osu.edu).
2. Flipgrid is a Microsoft tool that will be used to facilitate the book and movie discussions. Students can read about Flipgrid here: <https://info.flipgrid.com/>. Details on how to sign up and create videos will be included on Carmen, along with a short video example.
3. *Required equipment*
 - a. Computer: current Mac (MacOs) or PC (Windows 10) with high-speed internet connection
 - b. Webcam: built-in or external webcam, fully installed and tested
 - c. Microphone: built-in laptop or tablet mic or external microphone
 - d. Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Security Policies

OSU Information Technology's Security Policy can be found here: <https://ocio.osu.edu/sites/default/files/assets/Policies/ITSecurity.pdf>.

Additional information about cyber security can be found here: <https://cybersecurity.osu.edu/about>.

OSU Learning Accessibility Policies

<https://keeplearning.osu.edu/> and <https://resourcecenter.odee.osu.edu>
<https://www.instructure.com/canvas/accessibility>

Technology support

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** ocio.osu.edu/help
- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu
- **TDD:** 614-688-8743

Office of Student Life: Disability Services

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Office of Student Life: Disability Services at 614-292-3307 in Room 098 Baker Hall 113 W. 12th Ave. to coordinate reasonable accommodations for students with documented disabilities (<http://slds.osu.edu/>).

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Mental Health Services

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org.

Academic integrity

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University, the College of Public Health, and the Committee on Academic Misconduct (COAM) expect that all students have read and understood the University's Code of Student Conduct and the School's Student Handbook, and that all students will complete all academic and scholarly assignments with fairness and honesty. The Code of Student Conduct and other information on academic integrity and academic misconduct can be found at the COAM web pages (<https://oaa.osu.edu/academic-integrity-and-misconduct>). Students must recognize that failure to follow the

rules and guidelines established in the University’s Code of Student Conduct, the Student Handbook, and in the syllabi for their courses may constitute “Academic Misconduct.”

The Ohio State University’s Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: “Any activity that tends to compromise the academic integrity of the University, or subvert the educational process.” Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Please note that the use of material from the Internet without appropriate acknowledgement and complete citation is plagiarism just as it would be if the source were printed material. Further examples are found in the Student Handbook. Ignorance of the Code of Student Conduct and the Student Handbook is never considered an “excuse” for academic misconduct.

If I suspect a student of academic misconduct in a course, I am obligated by University Rules to report these suspicions to the University’s Committee on Academic Misconduct. If COAM determines that the student has violated the University’s Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in the course and suspension or dismissal from the University. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Child Care Access Means Parents in School Program

The Office of Diversity and Inclusion provides holistic support for qualifying student parents enrolled at Ohio State. To learn more, contact the “Child Care Access Means Parents in School” (CCAMPIS) Program at 614-247-7092/ lewis.40@osu or visit odi.osu.edu/ccampis

Health and Safety Requirements

Health and safety requirements: All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (<https://safeandhealthy.osu.edu>), which includes wearing a face mask in any indoor space and maintaining a safe physical distance at all times. Non-compliance will be warned first and disciplinary actions will be taken for repeated offenses.

Content/Assignments Aligned with Course Learning Outcomes

	Foundational and Specialization Competencies	CEPH Domains	CEPH Cross-Cutting Concepts	Course Learning Outcomes
Research Paper (Draft, Peer Review, Final)	2, 3, E-1, E-3, S-1	3, 4, 5	1, 10	2, 3, 4
Acute Public Health Event Press Release (Draft, Peer Review, Final)	6, E-3	3, 9	1, 3	5
Acute Public Health Events and Society Reflections/Discussion	4, S-1, S-4	5	4, 5	4
Investigate and Collaborate Discussions (8 weeks)	7	9	9, 11	1, 5
Quizzes and Assignments	2,	1, 2	1, 5	1, 3
Measures Assignment	E-1	2	2	1,
Module on "Intro to Epidemiologic Methods"		1, 3		

Course Outline

Week/ Module	Topics	Textbook Readings	Additional Materials	Assignments Due In Addition to Weekly Quizzes; *IC= Investigate and Collaborate
1	Defining Field Epidemiology; Introduction to Epidemiologic Principles	Ch 1	Principles of Epidemiology in Public Health Practice (Available at https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section1.html)	Canvas Familiarity and Syllabus Quiz
2	Initiating Operations; Conducting a Field Investigation	Ch 2, Ch 3	Roxby AC, Greninger AL, Hatfield KM, et al. Outbreak Investigation of COVID-19 Among Residents and Staff of an Independent and Assisted Living Community for Older Adults in Seattle, Washington. <i>JAMA Intern Med.</i> 2020;180(8):1101–1105. doi:10.1001/jamainternmed.2020.2233	Measures Exercise
3	Collecting Data; Technology for Data Collection and Management	Ch 4, Ch 5		Diagnosis Exercise; IC#1
4	Disease Outbreaks and Society		Piarroux R, Barrais R, Faucher B, Haus R, Piarroux M, Gaudart J, Magloire R, Raoult D. Understanding the cholera epidemic, Haiti. <i>Emerg Infect Dis.</i> 2011 Jul;17(7):1161-8. doi: 10.3201/eid1707.110059. PMID: 21762567; PMCID: PMC3381400.	Reflection Assignment; Press Release Draft
5	Describing Epidemiologic Data; Designing and Conducting Analytic Studies in the Field	Ch 6, Ch 7		Press Release Peer Review; IC#2
6	Analyzing and Interpreting Data; Collecting and Analyzing Qualitative Data	Ch 8, Ch 10		Book Club Discussion #1; IC#3
7	Developing Interventions; Communicating During an Outbreak or Public Health Investigation	Ch 11, Ch 12	Infodemics: https://www.who.int/health-topics/infodemic#tab=tab_1	IC#4
8	Multinational Outbreak Investigation; GIS Data	Ch 15, Ch 17	Global outbreak research: harmony not hegemony Akhvediani, Tamuna et al. <i>The Lancet Infectious Diseases</i> , Volume 20, Issue 7, 770 - 772	Press Release Final Submission
9	Exposures and Conditions of Acute Environmental Origin	Ch 20		Book Club Discussion #2; CDC Exercise
10	Pandemics: past & present		Piret, J., Boivin, G. (2021) Pandemics Throughout History, <i>Frontiers in Microbiology</i> . 10.3389/fmicb.2020.631736	IC#5; Research Paper Draft
11	Natural and Human-Made Disasters	Ch 22	Watson JT, Gayer M, Connolly MA. Epidemics after natural disasters. <i>Emerg Infect Dis.</i> 2007 Jan;13(1):1-5. doi: 10.3201/eid1301.060779. PMID: 17370508; PMCID: PMC2725828. The Social Consequences of Disasters: Individual and Community Change Mariana Arcaya, Ethan J. Raker, Mary C. Waters <i>Annual Review of Sociology</i> 2020 46:1, 671-691	Research Paper Peer Review; IC#6
12	Acute Enteric Disease Outbreaks	Ch 23	https://www.cdc.gov/foodsafety/outbreaks/basics/epi-curves.html ; Foodborne Disease Outbreaks: Guidelines for Investigation and Control; available at: http://apps.who.int/iris/bitstream/handle/10665/43771/9789241547222_eng.pdf?sequence=1 ; Jacques-Antoine Hennekinne, Marie-Laure De Buyser, Sylviane Dragacci, Staphylococcus aureus and its food poisoning toxins: characterization and outbreak investigation, <i>FEMS Microbiology Reviews</i> , Volume 36, Issue 4, July 2012, Pages 815–836, https://doi.org/10.1111/j.1574-6976.2011.00311.x	IC#7; MMWR Exercise
13	Suspected Intentional Use of Biologic and Toxic Agents	Ch 24	Riedel S. Biological warfare and bioterrorism: a historical review. <i>Proc (Bayl Univ Med Cent)</i> . 2004 Oct;17(4):400-6. doi: 10.1080/08998280.2004.11928002. PMID: 16200127; PMCID: PMC1200679.	IC#8; Research Paper Final Submission
14	Public Health Emergencies and Society		https://theconversation.com/how-3-prior-pandemics-triggered-massive-societal-shifts-146467 ; https://news.stanford.edu/2020/04/30/pandemics-catalyze-social-economic-change/	Book Club Discussion #3; APHE and Society Discussions and Reflections

*****Bold indicates Program Competencies, Domains, and Concepts aligned with this course.**

BSPH Foundational (Core) Competencies	BSPH – Environmental Public Health Specialization Competencies	BSPH – Public Health Sociology Specialization Competencies	CEPH Domains	CEPH Cross-Cutting Concepts
<p>1. Summarize the historic milestones in public health which have influenced current roles and responsibilities of current public health agencies, organizations and systems.</p> <p>2. Compare and contrast types of major domestic and international public health issues, including sources/causes of infectious/chronic diseases, transmission, risk factors, morbidity and mortality.</p> <p>3. Discuss various approaches/strategies for identification, response and intervention to address and attempt to resolve common public health issues.</p> <p>4. Identify genetic, social, political, cultural, behavioral, socioeconomic, demographic and ethical factors and relationships to domestic and international public health issues and determinants of health.</p> <p>5. Apply the fundamental principles of the five core disciplines of public health (biostatistics; environmental health; epidemiology; health administration/policy; health behavior/promotion) to domestic and international population health issues.</p> <p>6. Communicate public health information, in both oral and written forms, through a variety of media and to diverse audiences.</p> <p>7. Locate, use, evaluate and synthesize public health information.</p>	<p>1. Apply principles of math, chemistry, biology to applied science of environmental public health.</p> <p>2. Use the Environmental Science Health model to explain environmentally-related exposures and human diseases</p> <p>3. Summarize management, technical measures and approaches to reduce and prevent the disease.</p>	<p>1. Employ specific sociological theories, both classical and contemporary, to explain the unequal distribution of health among different subpopulations in the United States and throughout the world. Identify how these theories can extend our knowledge of disease processes and prevention and intervention opportunities beyond typical public health perspectives.</p> <p>2. Interpret population health patterns using rigorous methods of sociological inquiry that stem from both qualitative and quantitative reasoning, augmenting what public health researchers and practitioners typically use.</p> <p>3. Illustrate how sociological perspectives of stratification – particularly along the lines of race, class, and gender – expand typical public health perceptions and approaches</p> <p>4. Identify social and public policies that differentially affect the unequal distribution of health in society as well as the social process that led to their creation and keep them in place.</p>	<p>1. the history and philosophy of public health as well as its core values, concepts and functions across the globe and in society</p> <p>2. the basic concepts, methods and tools of public health data collection, use and analysis and why evidence-based approaches are an essential part of public health practice</p> <p>3. the concepts of population health, and the basic processes, approaches and interventions that identify and address the major health-related needs and concerns of populations</p> <p>4. the underlying science of human health and disease, including opportunities for promoting and protecting health across the life course</p> <p>5. the socioeconomic, behavioral, biological, environmental and other factors that impact human health and contribute to health disparities</p> <p>6. the fundamental concepts and features of project implementation, including planning, assessment and evaluation</p> <p>7. the fundamental characteristics and organizational structures of the US health system as well as the differences between systems in other countries</p> <p>8. basic concepts of legal, ethical, economic and regulatory dimensions of health care and public health policy and the roles, influences and responsibilities of the different agencies and branches of government</p> <p>9. basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology</p>	<p>1. advocacy for protection and promotion of the public’s health at all levels of society</p> <p>2. community dynamics</p> <p>3. critical thinking and creativity</p> <p>4. cultural contexts in which public health professionals work</p> <p>5. ethical decision making as related to self and society</p> <p>6. independent work and a personal work ethic</p> <p>7. networking</p> <p>8. organizational dynamics</p> <p>9. professionalism</p> <p>10. research methods</p> <p>11. systems thinking</p> <p>12. teamwork and leadership</p>

GE Theme course submission worksheet: Health & Wellbeing

Overview

Courses in the GE Themes aim to provide students with opportunities to explore big picture ideas and problems within the specific practice and expertise of a discipline or department. Although many Theme courses serve within disciplinary majors or minors, by requesting inclusion in the General Education, programs are committing to the incorporation of the goals of the focal theme and the success and participation of students from outside of their program.

Each category of the GE has specific learning goals and Expected Learning Outcomes (ELOs) that connect to the big picture goals of the program. ELOs describe the knowledge or skills students should have by the end of the course. Courses in the GE Themes must meet the ELOs common for **all** GE Themes and those specific to the Theme, in addition to any ELOs the instructor has developed specific to that course. All courses in the GE must indicate that they are part of the GE and include the Goals and ELOs of their GE category on their syllabus.

The prompts in this form elicit information about how this course meets the expectations of the GE Themes. The form will be reviewed by a group of content experts (the Theme Advisory) and by a group of curriculum experts (the Theme Panel), with the latter having responsibility for the ELOs and Goals common to all themes (those things that make a course appropriate for the GE Themes) and the former having responsibility for the ELOs and Goals specific to the topic of **this** Theme.

Briefly describe how this course connects to or exemplifies the concept of this Theme (Health & Wellbeing)

In a sentence or two, explain how this class “fits’ within the focal Theme. This will help reviewers understand the intended frame of reference for the course-specific activities described below.

(enter text here)

Connect this course to the Goals and ELOs shared by *all* Themes

Below are the Goals and ELOs common to all Themes. In the accompanying table, for each ELO, describe the activities (discussions, readings, lectures, assignments) that provide opportunities for students to achieve those outcomes. The answer should be concise and use language accessible to colleagues outside of the submitting department or discipline. The specifics of the activities matter—listing “readings” without a reference to the topic of those readings will not allow the reviewers to understand how the ELO will be met. However, the panel evaluating the fit of the course to the Theme will review this form in conjunction with the syllabus, so if readings, lecture/discussion topics, or other specifics are provided on the syllabus, it is not necessary to reiterate them within this form. The ELOs are expected to vary in their “coverage” in terms of number of activities or emphasis within the course. Examples from successful courses are shared on the next page.

Goal 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations. In this context, “advanced” refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities.

Goal 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

	Course activities and assignments to meet these ELOs
ELO 1.1 Engage in critical and logical thinking.	
ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or ideas within this theme.	
ELO 2.1 Identify, describe, and synthesize approaches or experiences.	
ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.	

Example responses for proposals within “Citizenship” (from Sociology 3200, Comm 2850, French 2803):

ELO 1.1 Engage in critical and logical thinking.	<i>This course will build skills needed to engage in critical and logical thinking about immigration and immigration related policy through: Weekly reading response papers which require the students to synthesize and critically evaluate cutting-edge scholarship on immigration; Engagement in class-based discussion and debates on immigration-related topics using evidence-based logical reasoning to evaluate policy positions; Completion of an assignment which build skills in analyzing empirical data on immigration (Assignment #1)</i>
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	<p>Completion 3 assignments which build skills in connecting individual experiences with broader population-based patterns (Assignments #1, #2, #3)</p> <p>Completion of 3 quizzes in which students demonstrate comprehension of the course readings and materials.</p>
<p>ELO 2.1 Identify, describe, and synthesize approaches or experiences.</p>	<p>Students engage in advanced exploration of each module topic through a combination of lectures, readings, and discussions.</p> <p><u>Lecture</u> Course materials come from a variety of sources to help students engage in the relationship between media and citizenship at an advanced level. Each of the 12 modules has 3-4 lectures that contain information from both peer-reviewed and popular sources. Additionally, each module has at least one guest lecture from an expert in that topic to increase students' access to people with expertise in a variety of areas.</p> <p><u>Reading</u> The textbook for this course provides background information on each topic and corresponds to the lectures. Students also take some control over their own learning by choosing at least one peer-reviewed article and at least one newspaper article from outside the class materials to read and include in their weekly discussion posts.</p> <p><u>Discussions</u> Students do weekly discussions and are given flexibility in their topic choices in order to allow them to take some control over their education. They are also asked to provide information from sources they've found outside the lecture materials. In this way, they are able to explore areas of particular interest to them and practice the skills they will need to gather information about current events, analyze this information, and communicate it with others.</p> <p>Activity Example: Civility impacts citizenship behaviors in many ways. Students are asked to choose a TED talk from a provided list (or choose another speech of their interest) and summarize and evaluate what it says about the relationship between civility and citizenship. Examples of Ted Talks on the list include Steven Petrow on the difference between being polite and being civil, Chimamanda Ngozi Adichie's talk on how a single story can perpetuate stereotypes, and Claire Wardle's talk on how diversity can enhance citizenship.</p>
<p>ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.</p>	<p>Students will conduct research on a specific event or site in Paris not already discussed in depth in class. Students will submit a 300-word abstract of their topic and a bibliography of at least five reputable academic and mainstream sources. At the end of the semester they will submit a 5-page research paper and present their findings in a 10-minute oral and visual presentation in a small-group setting in Zoom.</p> <p>Some examples of events and sites: The Paris Commune, an 1871 socialist uprising violently squelched by conservative forces</p>

	<p><i>Jazz-Age Montmartre, where a small community of African-Americans—including actress and singer Josephine Baker, who was just inducted into the French Pantheon—settled and worked after World War I.</i></p> <p><i>The Vélodrome d’hiver Roundup, 16-17 July 1942, when 13,000 Jews were rounded up by Paris police before being sent to concentration camps</i></p> <p><i>The Marais, a vibrant Paris neighborhood inhabited over the centuries by aristocrats, then Jews, then the LGBTQ+ community, among other groups.</i></p>
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Goals and ELOs unique to Health & Wellbeing

Below are the Goals and ELOs specific to this Theme. As above, in the accompanying Table, for each ELO, describe the activities (discussions, readings, lectures, assignments) that provide opportunities for students to achieve those outcomes. The answer should be concise and use language accessible to colleagues outside of the submitting department or discipline. The ELOs are expected to vary in their “coverage” in terms of number of activities or emphasis within the course. Examples from successful courses are shared on the next page.

GOAL 3: Students will explore and analyze health and wellbeing through attention to at least two dimensions of wellbeing. (Ex: physical, mental, emotional, career, environmental, spiritual, intellectual, creative, financial, etc.).

	Course activities and assignments to meet these ELOs
ELO 3.1 Explore and analyze health and wellbeing from theoretical, socio-economic, scientific, historical, cultural, technological, policy, and/or personal perspectives.	
ELO 3.2 Identify, reflect on, or apply strategies for promoting health and well-being.	