

Graduate School of Public Health

PUBHLT2011 Essentials of Public Health

Spring term 2022

Wednesday and Thursday, 5:30 – 6:55PM

Online via Zoom during the elevated COVID response posture; once in-person classes resume, we will meet in room 232 of the Cathedral of Learning.

Credit Hours: 3

Logistics/Contact Information

- Course director and Primary Instructor: Jeremy Martinson D.Phil, Dept of Infectious Diseases and Microbiology
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- Email: jmartins@pitt.edu
- Office: 2134 Pitt Public Health
- Office hours: 4-5PM Wednesday and Thursday, or email to arrange a different time

Accommodations to COVID-19 spring 2022 This course will begin as a fully remote-taught course, while the University is in its current response posture to COVID-19. Classes will be taught via Zoom, using the link provided on the course Canvas page. If the University lowers its response posture as planned we will be able to resume in-class instruction in room 232 of the Cathedral of Learning. We will discuss this in class should the need arise.

Course Description *Official description from University course catalog:* The course provides Pitt Public Health students enrolled in MS, PhD and MHA degree programs with an introduction and overview of the scope and history of public health, as well as core concepts in public health not covered in the core epidemiology and biostatistics courses.

Detailed description: This single three-credit course is aimed at meeting the Public Health educational needs of Pitt Public Health's non-MPH degree students that were formerly provided by other courses totaling twelve credits. It is now in its fifteenth year and has continued to be revised. Your involvement in evaluating the course contents and goals, and in helping us improve the course, is always welcome.

CEPH competencies: We feel that any student receiving a degree from Pitt Public Health should be familiar with the essential core concepts and knowledge base of the overall field of Public Health. In addition, Pitt Public Health is accredited by the Council on Education in Public Health (CEPH) as a school authorized to offer the Master of Public Health (MPH) degree. Part of that accreditation requires us to provide instruction in Public Health to all our students, not just those enrolled in the MPH. CEPH has identified the following 12 foundational Public Health Knowledge competencies, which it expects all non-MPH graduates to accomplish:

- K1. Explain public health history, philosophy and values
- K2. Identify the core functions of public health and the 10 Essential Services
- K3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health
- K4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program
- K5. Discuss the science of primary, secondary and tertiary prevention in population health, including health promotion, screening, etc.
- K6. Explain the critical importance of evidence in advancing public health knowledge
- K7. Explain effects of environmental factors on a population's health
- K8. Explain biological and genetic factors that affect a population's health
- K9. Explain behavioral and psychological factors that affect a population's health
- K10. Explain the social, political and economic determinants of health and how they contribute to population health and health inequities
- K11. Explain how globalization affects global burdens of disease
- K12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)

Your mastery of these competencies will be assessed in multiple ways. Basic factual knowledge is tested in an in-class MCQ midterm and an online MCQ final, both of which mimic the CPH exam described below. Deeper understanding of them all is also assessed in the take-home essay midterm, and many of them will be addressed in your final project, but as the choice of project topic is made by the student, not every project will address every competency equally.

The purpose of this course is to provide an introduction and overview of Public Health, including those concepts listed above but not covered in the core epidemiology and biostatistics courses, to those Pitt Public Health graduate students not receiving an MPH degree. Consequently, **this course is required for all Pitt Public Health students who are not enrolled in the MPH program, or do not already have an MPH from a CEPH-accredited institution in the USA.** Other students are welcome to enroll in this course, although permission from the Course Director is required.

All students graduating from Pitt Public Health are now entitled to take the Certified in Public Health (CPH) exam, offered by the National Board of Public Health Examiners. While not a test preparation course, PUBHLT2011 is intended, along with the core epidemiology and biostatistics courses, to provide non-MPH Pitt Public Health students with enough material to enable them to achieve a passing grade in the CPH exam.

Learning Objectives Upon completion of this course, students will be able to:

- Define the scope of public health
- Describe historical foundations of public health and relate them to contemporary issues in public health
- Describe the major determinants of ill health, and the role of population and community-based approaches in health issues
- Be conversant with the core curriculum and central concepts of Behavioral and Community Health Sciences, Environmental and Occupational Health, and Health Policy and Management; as well as have knowledge pertinent to human genetics and infectious disease
- Be familiar with the interface between public health science and policy, and the role of public health science in protecting the health of the public
- Recognize the integration of disciplines and the multi-disciplinary collaboration necessary to address the multiple determinants of health
- Understand the principles, design, and evaluation of a public health intervention.

Required Textbooks/Articles/Readings There is no required textbook for the course. A good overview of Public Health can be found in any of:

- *Public Health 101*, 3rd Ed, by Riegelman and Kirkwood (Jones and Bartlett, 2019)
- *Introduction to Public Health*, 6th Ed, by Schneider (Jones and Bartlett, 2021)
- *Essentials of Public Health*, 3rd Ed, by Birkhead, Morrow, and Pirani (Jones and Bartlett, 2021) [earlier editions were authored by Turnock]
- *Introduction to Public Health*, 2nd Ed, by Goldstein, Goldstein, and Dwelle (Springer, 2015)
- *Scutchfield and Keck's Principles of Public Health Practice*, 4th Ed, by Erwin and Brownson (Delmar Cengage, 2017)

Please note, however, that it is **not a requirement** that you purchase any of these books.

Supplemental Readings/Bibliography Reading materials, including primary literature, case reports, or other publications, will be placed on Canvas as required by the instructors.

Canvas Instruction This course will extensively use the University's Canvas site. Each lecture will be accompanied by supporting material and further reading, all of which will be made available around the time of the lecture. It is the student's responsibility to check for, and read, this material. The instructors will use the Canvas site and Pitt email as the primary means of communicating with the students, who are expected to check these on a regular basis throughout the semester.

Required or Recommended Software There is no required software package for this course.

Required or Recommended Equipment No equipment is required for this course.

Class Expectations/Behavior and Ground Rules Attendance at class is expected and a register may be taken. If you have professional obligations that prevent you from attending certain classes, please let the Course Director know in advance.

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.

Much of the course material can best be presented in a discussion format, rather than a didactic lecture. Please be prepared to discuss each week's topic, particularly by reading any material that is posted on Courseweb before class.

Grading Scale This course is letter graded, and grades will be assigned as follows:

Percentage	Grade
97.5-100%	A+
92.5-97.5%	A
90-92.5%	A-
87.5-89.9%	B+
82.5-87.5%	B
80-82.5%	A
70-79%	C
60-69%	D
<60%	F

Student Performance Evaluation (Assessments and Weights) Grades will be based upon examinations, student project/presentation, and student participation, including attendance at lectures and answering of questions related to the reading. Failure to submit an acceptable project will result in a failing grade.

The grading components are weighted as follows:

Component	Weight
Midterm exam 1 (MCQ)	10%
Midterm exam 2 (essay)	35%
Final exam (MCQ)	10%
Final project	35%
Attendance/participation	10%

The midterm and final online MCQ exams will contain questions that assess factual recall and awareness of those knowledge competencies presented by the time the exam is offered (primarily K1-K6 in the midterm, and K1-K12 in the final). The take-home essay midterm will include questions that enable the student to discuss more fully the knowledge competencies presented by the time the midterm is offered (primarily K1-10). Students will be expected to demonstrate familiarity with those competencies that are most relevant to their chosen project topic in their final presentation.

Assignments and Descriptions The final project is a major component of this course. Each student will work on a project that will be written up as a presentation at the end of the semester, but due to time constraints it will not be possible for you to present these in class. These presentation topics must focus on integration of concepts and information. The subjects must have a breadth of content that takes the student beyond one particular public health discipline. For each project, you will design a Public Health action or intervention that will include recommendations for assessment, assurance, and policy development. (Note: the project and its evaluation are to be designed but not performed). Student projects are an important part of the course as they allow you to demonstrate your understanding of Public Health. Optimally, the project will provide you with the opportunity to explore the broader Public Health aspects of your MS or PhD research topic, but you are welcome to choose a different topic for your intervention if you prefer. Your project will vary depending upon your interests and will require discussion with

your faculty mentor. You must include a “logic model” that will provide an overview of the expected inputs, outputs and outcomes of your proposed project. We will have an in-class workshop devoted to the end-of-semester project and logic model in the first month of the course.

Your faculty mentor will usually be from your own department. By the end of January (soft deadline), you must email the title and/or a brief (one paragraph at the most) description of the proposed project to Dr Martinson and your Faculty Mentor. By the end of February (soft deadline), you must email a more detailed outline of the proposed project by to these individuals. These two documents will not be graded, although points from the final grade may be deducted for late submission—their purpose is to allow your mentor to provide feedback to you.

Your final project documents must be submitted electronically by March 31st (firm deadline). These documents will consist of an annotated Power Point presentation, using the speaker’s notes section to provide supporting information for each slide figure, and a one-page logic model that summarizes the intervention. Due to the increased enrollment in this course we will not have time for in-class presentations. Further guidance as to the logistics of the presentations will be given during the course.

Sessions and Assignments This course can be considered in three main sections. In the first part, we will review the history of the concept of Public Health, the way in which it is organized and delivered in the USA, and some of its notable successes and ongoing challenges. We will discuss the main qualitative and quantitative methods used to obtain public health data, and review some of the major trends in morbidity and mortality in the USA over the past two centuries. These sessions will also introduce the core functions and essential services of Public Health, as well as the concepts of primary, secondary, and tertiary prevention. Examples of this in health promotion will be presented. **These sessions will primarily address competencies K1, K2, K3, K4, K5, and K6.**

The middle part of the course will consist of guest presentations from faculty in the departments of Behavioral and Community Health Sciences (BCHS), Environmental and Occupational Health (EOH), and Health Policy and Management (HPM), who will give overviews of the work of their departments and disciplines. Core information and concepts about BCHS, HPM, and EOH are a necessary part of the class, and integration of this core information with epidemiology and biostatistics will be essential, however core epidemiology and biostatistics will not be formally taught. **These sessions will reinforce competencies K1-K6, but will also introduce competencies K7, K8, K9, and K10.**

The final part of the course will integrate many of the concepts covered in the previous two parts, and show how they come together in the field of Public Health practice. This section will feature guest presenters from institutions involved in Public Health practice, such as the Allegheny County Health Department. We will also expand the scope of the course by discussing Global Health issues, including communicable and noncommunicable disease patterns in High-income and Low and Middle income countries (LMICs). **These sessions will further reinforce competencies K1-K10, but will also address competencies K11 and K12.**

Week 1 (January 12th and 13th 2022)

Introduction and History. The first week’s classes are intended to give you an introduction to the course itself and to the field of Public Health. It will include an overview of the ASPH definitions of Public Health and its components, and an overview of the core functions and essential services provided by Public Health in the USA. **Addresses competencies K1 and K2.**

Week 2 (January 19th and 20th 2022)

How is Public Health done, and why is it controversial? On Wednesday, the class will consider the social and political framework in which Public Health operates. On Thursday, we will discuss why some Public Health initiatives have proven controversial. **Addresses competencies K1, K2, and K5.**

Week 3 (January 26th and 27th 2022)

PHI workshop. This week’s classes will focus on the Public Health Intervention that is the subject of your end-of-semester project. The Wednesday session will be given over to a discussion of your PHI Project, and a workshop on Logic Models. The Thursday session will be given by Dr Elizabeth Felter, of the Department of Behavioral and Community Health Sciences, who will discuss key concepts in health literacy and health communication. **Also addresses competencies K5 and K9.**

The title of your Public Health Intervention is due by January 31st.

Week 4 (February 2nd and 3rd 2022)

Public Health achievements. This week's classes will consider recent achievements in Public Health, including the CDC's ten great Public Health successes of the 20th century, and will conclude with a consideration of the challenges that face us in the 21st century. **Addresses competencies K3, K4, K6 and K8.**

Week 5 (February 9th and 10th 2022)

Behavioral and Community Health Sciences. Dr. Thistle Elias of BCHS will give two presentations on the work of her department and on methods in community-based participatory research. **Addresses competencies K5, K9, and K10.**

Week 6 (February 16th and 17th 2022)

Ethical Practice in Public Health research. On Wednesday, Dr. Martinson will review many past issues of ethical malpractice in research, leading to the production of the Belmont report. This session will also discuss the importance of community participation in the research process, with particular reference to the work of the Pitt Men's Study, a leading example of public health research work within the community. **Addresses competencies K3, K9, and K10.**

The first midterm will be an in-class MCQ exam on Thursday February 17th.**

Week 7 (February 23rd and 24th 2022)

Environmental Health in southwest Pennsylvania. On Wednesday, Dr. Martinson will give a presentation on the 1948 Donora smog incident and the emergence of environmental health legislation. This will be followed by a discussion of the impact of the southwest Pennsylvania region on environmental health throughout the 20th and 21st centuries. **Addresses competencies K6 and K7.**

Health literacy. On Thursday, Dr. Felter will return to give a class on health literacy and understanding. **Addresses competencies K5 and K9.**

The outline for your Public Health Intervention is due by February 28th.

Week 8 (March 2nd and 3rd 2022)

Environmental and Occupational Health. This week, Dr. Nesta Bortey-Sam of EOH will give two lectures on Environmental Health, covering core environmental health concepts, including the toxicological basis for the health effects of external chemical and physical agents, and the fundamentals of risk assessment and risk management. **Addresses competencies K7 and K8.**

The take-home midterm exam questions will be made available online after class on March 3rd.

Week 9 (March 9th and 10th 2022)

Spring break - no classes

Week 10 (March 16th and 17th 2022)

The take-home midterm exam answers must be submitted online by the start of class on March 16th.

Public Health in Action. On Wednesday, Dr. Maureen Lichtveld, Dean of Pitt Public Health, will give a presentation on Public Health in the 21st century. **Addresses competencies K2 and K10.**

Health Policy and Management. On Thursday, Dr. Kevin Broom of HPM will give a lecture on healthcare delivery within the federal government, comparing the integrated health systems of the VA, the Department of Defense, and the Indian Health Service. **Addresses competencies K1, K6, and K10.**

Week 11 (March 23rd and 24th 2022)

Health Policy and Management. On Wednesday, Prof. Tina Batra Hershey of HPM will give a presentation on health policy and policymaking. **Addresses competencies K1, K6, and K10.**

Health Policy and Management. On Thursday, Prof. Meredith Hughes of HPM will give a presentation on health law and pandemics. **Addresses competencies K1, K6, and K10.**

Week 12 (March 30th and 31st 2022)

Global Health. On Wednesday, Dr. Martinson will discuss many of the greatest Global Health challenges of the 21st century, including the "One Health" concept. **Addresses competencies K11 and K12.**

Health Policy and Management. On Thursday, Dr. Lindsay Sabik of HPM will give a presentation on health economics and healthcare access. **Addresses competencies K1, K6, and K10.**

The final version of your Public Health Intervention is due by March 31st.

Week 13 (April 6th and 7th 2022)

Environmental and Occupational Health. Prof. Bernie Goldstein, emeritus professor of EOH, former Pitt Public Health Dean, and creator of this course, will cover further topics in environmental health, including the role of risk communication and of community involvement. He will also consider the concept of Environmental Justice. **Addresses competencies K7, K8 and K10.**

Week 14 (April 13th and 14th 2022)

Public Health in action. On Wednesday, Dr. Martha Terry of BCHS will discuss a community-based intervention she led, aimed at condom use and HIV prevention. **Addresses competencies K5, K9, and K10.**

Public Health in Action. On Thursday, Dr. Robin Grubs, director of the Genetic Counseling program in the Dept. of Human Genetics, will present a module on Modern Genetics and Public Health. **Addresses competencies K2 and K8.**

Week 15 (April 20th and 21st 2022)

Public Health in Action: Local Health Departments. On Wednesday, Annie Nagy MPH, of the Allegheny County Health Department, will give an overview of the work of the ACHD. On Thursday, Dr. LuAnn Brink of the ACHD, and Pitt Public Health alumna, will give a class on the ACHD's recent community health assessment program. **Addresses competencies K2, K3, K4, K5, and K6.**

Week 16 (April 27th and 28th 2022)

Finals week. There will be no in-class session, but the final MCQ exam will be available all week on Canvas.

Accommodation for Students with Disabilities *If you have any disability for which you may require accommodation, you are encouraged to notify both your instructor and the Office of Disability Resources and Services, 140 William Pitt Union (Voice or TTD 412-648-7890) as early as possible in the term.*

Academic Integrity Statement *All students are expected to adhere to the school's standards of academic honesty. Any work submitted by a student for evaluation must represent his/her own intellectual contribution and efforts. The Graduate School of Public Health's policy on academic integrity, approved by EPCC on 10/14/08, which is based on the University policy, is available online in the Pitt Public Health Academic Handbook (www.publichealth.pitt.edu/home/academics/academic-requirements). The policy includes obligations for faculty and students, procedures for adjudicating violations, and other critical information. Please take the time to read this policy.*

Sexual Misconduct, Required Reporting, and Title IX The University is committed to combatting sexual misconduct. As a result, you should know that University faculty and staff members are required to report any instances of sexual misconduct, including harassment and sexual violence, to the University's Title IX office so that the victim may be provided appropriate resources and support options. What this means is that as your professor, I am required to report any incidents of sexual misconduct that are directly reported to me, or of which I am somehow made aware.

There are two important exceptions to this requirement about which you should be aware:

A list of the designated University employees who, as counselors and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: www.titleix.pitt.edu/report/confidentiality.

An important exception to the reporting requirement exists for academic work. Disclosures about sexual misconduct that are shared as part of an academic project, classroom discussion, or course assignment, are not required to be disclosed to the University's Title IX office.

If you are the victim of sexual misconduct, Pitt encourages you to reach out to these resources:

- Title IX Office: 412-648-7860
- SHARE @ the University Counseling Center: 412-648-7930 (8:30 A.M. TO 5 P.M. M-F) and 412-648-7856 (AFTER BUSINESS HOURS)

If you have a safety concern, please contact the University of Pittsburgh Police, 412-624-2121.

Other reporting information is available here: www.titleix.pitt.edu/report-0

Diversity Statement The University of Pittsburgh Graduate School of Public Health considers the diversity of its students, faculty, and staff to be a strength and critical to its educational mission. Pitt Public Health is committed to creating and fostering inclusive learning environments that value human dignity and equity. Every member of our community is expected to be respectful of the individual perspectives, experiences, behaviors, worldviews, and backgrounds of others. While intellectual disagreement may be constructive, no derogatory statements, or demeaning or discriminatory behavior will be permitted.

If you feel uncomfortable or would like to discuss a situation, please contact any of the following:

- the course instructor
- the Pitt Public Health Associate Dean for Diversity at 412-624-3506 or nam137@pitt.edu
- the University's Office of Diversity and Inclusion at 412-648-7860 or <https://www.diversity.pitt.edu/make-report/report-form> (anonymous reporting form)

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Sources: Center for Instructional Design and Distance Education (CIDDE) Syllabus Template and Syllabus Checklist, Office of Disability Resources and Services, EPCC syllabus checklist.