	Population Health		
Course Syllabus			
Course Information	<ul> <li>Course: Population Health (#90-833 section A2 &amp; #90-433 section A2)</li> <li>Offering: Mini II (6 units)</li> <li>Location: Hamburg Hall 1004</li> <li>Time: Tuesdays, 6:20-9:10 pm</li> <li>Dates: October 18-December 3, 2021</li> <li>Instructor: Hannah E. Hardy, MPA Director, Chronic Disease &amp; Injury Prevention Program Allegheny County Health Department Hhardy@andrew.cmu.edu (412) 600-4277 (cell) I do not have office hours or an on-campus office, but I would be glad to set up a meeting with any student at a time that is convenient for both.</li> </ul>		
Prerequisites	Course Web Site: <a href="https://canvas.cmu.edu/courses/26113">https://canvas.cmu.edu/courses/26113</a> .  None		
Description	Have you heard the saying that your zip code determines how long you will live? This course will provide an opportunity for students to understand why that is the case and to explore what they can do about improving overall health outcomes through an understanding of population health. Students will be exposed to the leading frameworks of Population Health Management. Course content will help to determine the necessary building blocks, including the evaluation and implementation issues.		
	This introductory course will begin by providing an overview about population health and then addressing the key components in the field of population health. The issues we will examine include the way health care delivery systems, public health agencies, community-based organizations, and many other entities work together to develop interventions to improve the health outcomes in the local, national, and global communities they serve including policy consideration. Experts will be brought in to discuss the many ways that we can measure and address population health. The course includes a focus on improving health equity and reducing health disparities.		
	Students will have the opportunity to identify a specific population health topic that is of specific interest to explore through independent research that comprise the main assignments for the course. The instructor will provide feedback and assistance to help students identify an issue that is of interest to them.		
Course Materials	Recommended Readings: The following texts are available as part of the CMU Library reserves as online texts. These are recommended readings and not intended to be read from cover to cover. Students may pull out the most relevant chapters for their independent research.		
	Galeo, S. (2018). Healthier: Fifty Thoughts on the Foundations of Population Health. Oxford University Press.		

\*This book may not be electronically available on the first week of class. The library is adding it to the online offerings. There are several books by this author that are already included in the library reserves. I encourage you to look through his work.

Each week there are readings including articles and reports that relate to that week's course content. Those are available here on the syllabus and in Canvas. There will be discussion posts that are required every week that can be drawn from material in the weekly readings.

## Evaluation Method

Student performance will be evaluated as follows:

- Class participation (25%, 25 points): Students will be expected to participate in and in some cases lead group discussions during class. Willingness to participate, participation and communication style, and content will be assessed on an ongoing basis. Participation includes at least one post about course readings or presentations on the course discussion board per week. These discussions can be a couple of sentences or a paragraph. I will post a prompt for some of the weeks. Discussions posts should be posted by the Friday of each week on the appropriate discussion board in Canvas. Two points each for the discussion posts and the balance of the points will be given for class participation.
- Assignment 1 Problem Statement (30%, 30 points) (3-5 Pages):
   Describes the problem you want to address. Include information on who the problem affects, how many people are affected, and why there is a problem. Due by 11:59 pm on Friday November 15, 2021.
- Assignment 2 Population Health Presentation (10%, 10 points) (3-5 slides, 8-10-minute presentation): Students will be expected to present the problem they identified, provide a brief overview of their policy review, and make at least one recommendation based on their research done to date. Students may incorporate feedback they receive during the presentations into their final assignment. These presentations are due during class 6 on November 23, 2021.
- Assignment 3 Policy Review (35%, 35 points) (8-10 Pages): Review policies and identify programs/systems that exist to address the problem. Include a description of the existing programs/systems (e.g., services provided, people covered, funding sources, etc.) and gaps or limitations in existing programs/systems. Due by 11:59 pm on Friday December 3.

All written assignments should be properly cited with a Works Cited page and proper citations throughout.

# Learning/Course Objectives

- Develop an understanding of population health and relevant concepts including social determinants of health, health policy, the medical model, the public health model including the ten essential services of public health, measuring population health, community engagement, health disparities, and health equity.
- 2. Gain experience with identifying a problem and understanding the policy implications of that issue in population health.

	Develop presentation skills by presenting the student's own research to
Tooching	the class.
Teaching and	Class time will be approximately 50% lecture and 50% interactive. The interactive
Learning	sections will be discussion on the context of the lecture; in small groups;
Methods	presentation by students; or one-on-one with the instructor.
	Guest lecturers who are professionals working in relevant fields will deliver
	content at some of the classes. Students will have time to ask guest lecturers
	questions to learn from their expertise and experience.
	Working in small groups during class to teach and learn from one another will be
	used to help you develop a command of material from the class readings and to
	explore issues and options in development and execution of the concepts
	discussed. The discussion board posts will also be used to evaluate the student's
	understanding of the material and for the student to learn from each other's
	perspective on the course material.
<b>Grading Scale</b>	A 90-100% (90-100 points)
	B 80-89% (80-89 points)
	C 70-79% (70-79 points)
	D 60-69% (60-69 points)
	R (failing grade) <59% (<59 points)
Plagiarism and	Plagiarism and other forms of academic misrepresentation are taken extremely
Cheating Notice	seriously. Misrepresentation of another's work as one's own is widely recognized
	as among the most serious violations. The violation is clearly flagrant when it
	occurs as plagiarism on a required paper or assignment or as cheating on an
	examination, regardless of whether it is a take-home or in-class examination. The
	punishment for such offenses can involve expulsion from the program. There are
	many other ways in which a violation can occur.
	Academic Dishonesty: Students are expected to maintain the highest ethical
	standards inside and outside the classroom. Cheating on exams and term papers
	(i.e., plagiarism and unauthorized collaboration) is obviously discouraged and will
	be treated appropriately. The usual penalty for violations is a failing grade for the
	assignment in question; however, in some instances, such actions may result in a
	failing grade for this course.
Attendance and	Attendance:
Classroom	Notify me via email (hhardy@andrew.cmu.edu) at least 24 hours in
Environment	advance if you cannot attend a lecture.
Littii Olilliciit	advance if you cannot attend a feeture.
	Classroom environment:
	You're welcome to bring food and drink to class.
	Please refrain from using mobile phones during class except for during
	breaks.
	Please be present and focused during class; refrain from     Please be present and focused during class; refrain from     Please be present and focused during class; refrain from
	emailing/texting/communicating via social media during class activities.
	Policy on late deliverables:
	Folicy of fate deliverables.

	<ul> <li>Late deliverables are accepted except for assignment 2. A 10% deduction from total potential score will be deducted for every day a deliverable is late. Assignment 2 must be presented during the last class due to the course schedule. If you need an accommodation for this assignment, please talk to me well in advance.</li> </ul>
University Policy	The University's Office of Disability Resources works with students who require
on Accommodations	accommodation in the classroom. You may request accommodation for this class and should present me with a document from the Office of Disability Resources
Accommodations	that outlines the accommodations that must be provided. Additional information is on the University's website at <a href="http://www.cmu.edu/hr/eos/disability/faculty-staff/assist-students.html">http://www.cmu.edu/hr/eos/disability/faculty-staff/assist-students.html</a> .
The Importance	Please take care of yourself. Do your best to maintain a healthy lifestyle this
of Wellness	semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep, and taking some time to relax. This will help you achieve your goals and cope with stress.
	All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.
	If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is here to help call 412-268-2922 and visit their website at <a href="http://www.cmu.edu/counseling/">http://www.cmu.edu/counseling/</a> . Consider reaching out to a friend, faculty, or family member you trust for help getting connected to the support that can help.
	If you or someone you know is feeling suicidal or in danger of self-harm, call someone immediately, day or night:  CaPS: 412-268-2922
	Re:solve Crisis Network: 888-796-8226
	If the situation is life threatening, call the police: On campus: CMU Police: 412-268-2323 Off campus: 911.
	If you have questions about this or your coursework, please let me know.
	Class Schedule
Class 1	Objectives
October 19, 2021	Become familiar with the course schedule, required assignments and
	structure for each class.
	Understand primary concepts in the field of population health.      Discuss population health issues and identify topics for student research.
	<ul> <li>Discuss population health issues and identify topics for student research.</li> </ul>
	Class Content
	Population Health: Intro and Definitions
	What is population health?
	Social Determinants of Health

Health Disparities

# **Activity/Guest Speaker**

 Discussion about population health concepts and small group or individual research for assignment 1.

## Readings

- Kindig, D., & Stoddart, G. (2003). What is population health?. American journal of public health, 93(3), 380–383.
   <a href="https://doi.org/10.2105/ajph.93.3.380">https://doi.org/10.2105/ajph.93.3.380</a> Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447747/
- World Health Organization & Commission on Social Determinants of Health. (2008). Closing the gap in a generation: Health equity through action on the social determinants of health. <a href="https://www.who.int/social\_determinants/final\_report/csdh\_final\_lreport\_2008.pdf">https://www.who.int/social\_determinants/final\_report/csdh\_final\_lreport\_2008.pdf</a>
- The Community Tool Box Social Determinants of Health: <a href="https://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/social-determinants-of-health/main">https://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/social-determinants-of-health/main</a>
- Yearby, R. (2020). Structural Racism and Health Disparities: Reconfiguring the Social Determinants of Health Framework to Include the Root Cause. Journal of Law, Medicine & Ethics, 48, 518-526. https://doi.org/10.1177/1073110520958876
- Resource for assignment 1: <a href="https://www.who.int/health-topics/#P">https://www.cdc.gov/pophealthtraining/whatis.html</a>,
   <a href="https://www.cdc.gov/socialdeterminants/index.htm">https://www.cdc.gov/socialdeterminants/index.htm</a>,
   <a href="https://www.cdc.gov/socialdeterminants/">https://www.cdc.gov/socialdeterminants/"https://www.cdc.gov/socialdeterminants/">https://www.cdc.gov/socialdeterminants/</a>

#### **Deliverable**

• Discussion post due: Friday, October 22, 2021.

# Class 2 October 26, 2021

## **Objectives**

- Demonstrate how to use online population health data tools.
- Describe how geography interacts with population health.
- Understand how to analyze data to understand population health and to develop population health initiatives.

#### **Class Content**

Measuring Population Health

- Healthy People 2030
- CDC Places
- Patient Data
- Public Health Data
- Spatial Data- Geographic Information Systems (GIS)

#### Activity/Guest Speaker

 Guest Speaker: Robert Gradeck, Urban & Regional Analysis Program, University of Pittsburgh Western Pennsylvania Regional Data Center (WPRDC)

- Demo of various population health dashboards.
- Small group exercise with public facing data.

## Readings

- Catch up on the readings from week 1.
- Resources for in class work: <a href="http://www.wprdc.org/">http://www.alleghenycounty.us/Health-Department/Resources/Data-and-Reporting/Chronic-Disease-Epidemiology/Allegheny-County-Community-Indicators.aspx</a>,
   <a href="https://www.dhs.pa.gov/HealthInnovation/Pages/HealthEquity.aspx">https://www.dhs.pa.gov/HealthInnovation/Pages/HealthEquity.aspx</a>,

https://www.dhs.pa.gov/HealthInnovation/Pages/HealthEquity.aspx, https://www.cdc.gov/places/index.html, https://www.policymap.com/,

#### Deliverable

- Students are expected to notify the instructor of their population health related issue that they will be researching for assignments 1, 2 & 3 by the end of class.
- Discussion post due: Friday, October 29, 2021.

# Class 3 November 2, 2021

## **Objectives**

- Understand the policy implications of population health.
- Discuss the legislative process.
- Discuss alternate policy levers that can impact population health.

#### **Class Content**

The Big P and little p of Health Policy

- Legislation and Governmental Policy
- Health in All Policies (HiAP)
- Health Impact Assessments (HIA)

### **Activity/Guest Speaker**

- Guest Speaker: Maura Jacob, Health in All Policies Coordinator, Allegheny County Health Department.
- Cast study activity: quick Health Impact Assessment (HIA).

### Readings

- Annals of the New York Academy of Sciences, Volume: 896, Issue: 1, Pages: 281-293, First published: 06 February 2006, DOI: (10.1111/j.1749-6632.1999.tb08123.x) Available at:
  - https://nyaspubs.onlinelibrary.wiley.com/doi/full/10.1111/j.1749-6632.1999.tb08123.x#f1
- Shankardass et al. The implementation of Health in All Policies initiatives: a systems framework for government action. Health Research Policy and Systems (2018) 16:26 https://doi.org/10.1186/s12961-018-0295-z
- Stuckler, D. et al. (2009). The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis. The Lancet, 374(9686), 315-323.

	Resources for in class work:
	https://www.naccho.org/programs/community-health/healthy-
	community-design/health-impact-assessment,
	https://www.cdc.gov/healthyplaces/hia.htm.
	Deliverable
	Discussion post due: Friday, November 5, 2021.
Class 4	Objectives
November 9,	Discuss the essential components of population health management.
2021	
2021	Understand the complex nature of healthcare and the impacts on
	population health management.
	Introduce the value transformation in healthcare.
	Class Content
	Medical Model
	Population Health Management
	Activity/Guest Speaker
	Guest Speaker: Deb Donovan, VP, SDOH Strategy & Operations,
	Highmark Health.
	nighinark nearth.
	Readings
	<ul> <li>Hennessy, D. A., Flanagan, W. M., Tanuseputro, P., Bennett, C., Tuna, M.,</li> </ul>
	Kopec, J., Wolfson, M. C., & Manuel, D. G. (2015). The Population Health
	Model (POHEM): an overview of rationale, methods, and applications.
	Population health metrics, 13, 24. https://doi.org/10.1186/s12963-015-
	0057-x Available at:
	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4559325/
	Tim Carney presentation, which will be posted in Canvas.
	The Gravity Project: <a href="https://thegravityproject.net/">https://thegravityproject.net/</a> .
	The dravity Project. https://thegravityproject.het/.
	Deliverable
	<ul> <li>Assignment 1 is due by 11:59 pm Friday, November 15, 2021.</li> </ul>
	<ul> <li>Discussion post due: Friday, November 12, 2021.</li> </ul>
Class 5	Objectives
November 16,	<ul> <li>Understand the public health model for addressing population health.</li> </ul>
2021	<ul> <li>Discuss the differences between public health and population health.</li> </ul>
	page and an account of the page and a second o
	Class Content
	Public Health Model
	<ul> <li>10 Essentials Functions of Public Health</li> </ul>
	Public Health 3.0
	Activity/Guest Speaker
	Case study exercise and discussion.
	Readings

DeSalvo KB, Wang YC, Harris A, Auerbach J, Koo D, O'Carroll P. Public Health 3.0: A Call to Action for Public Health to Meet the Challenges of the 21st Century. Prev Chronic Dis 2017;14:170017. DOI: http://dx.doi.org/10.5888/pcd14.170017 Available at: https://www.cdc.gov/pcd/issues/2017/17 0017.htm Ten Essentials of Public Health: https://ctb.ku.edu/en/table-ofcontents/overview/models-for-community-health-anddevelopment/ten-essential-public-health-services/main • Frieden T. R. (2010). A framework for public health action: the health impact pyramid. American journal of public health, 100(4), 590–595. https://doi.org/10.2105/AJPH.2009.185652 • Daniel J. Friedman and Barbara Starfield, 2003: Models of Population Health: Their Value for US Public Health Practice, Policy, and Research American Journal of Public Health 93, 366\_369, https://doi.org/10.2105/AJPH.93.3.366 Available at: https://ajph.aphapublications.org/doi/10.2105/AJPH.93.3.366 Deliverable Discussion post due: Friday, November 19, 2021. Class 6 **Objectives** • To practice presentation skills by presenting student research to the November 23, 2021 class. **Class Content** Student Presentations. **Activity/Guest Speaker**  Student presentations. Deliverable Discussion post due: Friday, November 26, 2021. Assignment 2 – Population Health Presentation will be given during class. Class 7 **Objectives** November 30, • To discuss community and the role in population health especially in 2021 relation to the implementation of population health initiatives. • Understand the ethical issues of working with community members as part of addressing population health. **Class Content** Community Engagement • Community Based Participatory Research Health Ethics Community Health • Preventative Health Community Clinical Linkages **Activity/Guest Speaker** • Guest Speaker: Dr. Evangel Sarwar.

Case study exercise and discussion.

## Readings

- Community Centered Health-Homes, The Prevention Institute, available at:
  - https://www.preventioninstitute.org/sites/default/files/editor\_uploads/images/stories/Documents/HE\_Cmtycentered\_health\_homes\_032311.pdf
- Wendel, M. L., Gamey, W. R., Castle, B. F., & Ingram, C. M. (2018). Critical reflexivity of communities on their experience to improve population health. AJPH A Publication of the American Public Health Association, 108(7), 896-901.
- Mikesell, L., Bromley, E., & Khodyakov, D. (2013). Ethical communityengaged research: A literature review. American Journal of Public Health, 103(12), e7-e14. doi:10.2105/AJPH.2012.301605
- Wallerstein, N., & Duran, B. (2008). The theoretical, historical, and practice roots of CBPR. In M. Minkler, & N. Wallerstein (Eds.), Community-based participatory research for health; from process to outcomes (pp. 25-46). San Francisco, CA: Jossey-Bass.

#### Deliverable

- Discussion post due: Friday, December 3, 2021.
- Assignment 3 Policy Review is due by 11:59 pm on Friday December 3, 2021.