# PUBH 6525, SECTION 001

Introduction to Population Health: A Health System Perspective Fall/2018

# COURSE & CONTACT INFORMATION

Credits: 1 Meeting Day(s): Mondays Meeting Time: 3:35-5:45 Meeting Place: Mayo 325

Instructor: Donna McAlpine, PhD Email: mcalp004@umn.edu Office Phone: 612-625-9919 Office Hours: By appointment (use Google Calendar) Office Location: Mayo D376

# COURSE DESCRIPTION

Population health is the field of practice and research concerned with the health of groups of individuals and the equitable distribution of health within these groups. Populations may be defined by geographic area, by social and economic characteristics such as gender, socio-economic status, and race/ethnicity, by disease states such as persons with mental illness or diabetes, or by enrollment in a health care plan or utilization of a specific health care organization. Population health takes an upstream approach, focusing on the social determinants of health and fundamental issues of health equity. While improving population health requires the involvement of multiple sectors such as public health agencies, health departments, education, housing, faith-based organizations and criminal justice, here we focus on how population health can be addressed from within the health system through partnerships with other sectors. Using case studies, we will explore how population health innovations are applied by health systems.

# COURSE PREREQUISITES

Students enrolled in a Master's-level graduate program at the University of Minnesota

# COURSE GOALS & OBJECTIVES

My goal is that upon successful completion of the course, you will be able to:

- (1) Explain different conceptualizations of population health and health equity
- (2) Identify and interpret demographic and population health data
- (3) Conceptualize the link between social factors and health outcomes
- (4) Describe strategies for engaging stakeholders in population health interventions
- (5) Analyze the application of population interventions in real world settings

# METHODS OF INSTRUCTION AND WORK EXPECTATIONS

#### **Course Workload Expectations**

PubH 6525 is a 1 credit course offered over ½ of the full semester. The University expects that for each credit, you will spend a minimum of three hours per week attending class or comparable online activity, reading,

studying, completing assignments, etc. over the course of a 15-week term. Thus, this course requires approximately 45 hours of effort spread over the course of the term in order to earn an average grade.

This is a seminar course. Students should read the material (or review the videos) before coming to class and be prepared to take part in the discussion of the material. Lectures are intended to clarify and supplement required readings.

Slides and other materials will be posted on the course's Moodle website.

The success of the course will depend upon students' careful reading in advance of class.

A note on class participation, in-class and virtually: Class participation is very important, as is the continuity of discussion and cumulative learning from week to week. Thus, one component of students' grades (for a total of 10 points, or 10%) is participation in class discussions and online forums. Attendance in each of the 7 classes is expected. If a student must miss class for extenuating circumstances, he or she must notify the instructor in advance with an appropriate excuse (e.g., illness in self or family).

Students will receive a grade and feedback on their assignments in one week. Students can expect responses to emailed questions within 24 hours (except for weekends and holidays).

#### Learning Community

School of Public Health courses ask students to discuss frameworks, theory, policy, and more, often in the context of past and current events and policy debates. Many of our courses also ask students to work in teams or discussion groups. We do not come to our courses with identical backgrounds and experiences and building on what we already know about collaborating, listening, and engaging is critical to successful professional, academic, and scientific engagement with topics.

In this course, students are expected to engage with each other in respectful and thoughtful ways.

In group work, this can mean:

- Setting expectations with your groups about communication and response time during the first week of the semester (or as soon as groups are assigned) and contacting the TA or instructor if scheduling problems cannot be overcome.
- Setting clear deadlines and holding yourself and each other accountable.
- Determining the roles group members need to fulfill to successfully complete the project on time.
- Developing a rapport prior to beginning the project (what prior experience are you bringing to the project, what are your strengths as they apply to the project, what do you like to work on?)

In group discussion, this can mean:

- Respecting the identities and experiences of your classmates.
- Avoid broad statements and generalizations. Group discussions are another form of academic communication and responses to instructor questions in a group discussion are evaluated. Apply the same rigor to crafting discussion posts as you would for a paper.
- Consider your tone and language, especially when communicating in text format, as the lack of other cues can lead to misinterpretation.

Like other work in the course, all student to student communication is covered by the Student Conduct Code (<u>https://z.umn.edu/studentconduct</u>).

# COURSE TEXT & READINGS

The readings are listed in the next section and are available either through hyperlink or as a link to an article via the U of MN library or the Moodle website. There is no course textbook.

# COURSE OUTLINE/WEEKLY SCHEDULE

Week	Торіс	Readings	Activities/Assignments
Week 1 9/10	Introduction to Population Health	<ul> <li>Christianson, 2016; Kindig and Stoddard, 2003; Stoto, 2014; Sharfstein, 2014</li> </ul>	•
Week 2 9/17	Describing a Population	<ul> <li>Regions Hospital Community Needs Assessment; Goldman, 2014; American FactFinder</li> </ul>	<ul> <li>Bring Laptop to Class; Using Demographic Data exercise</li> <li>Assignment # 1 DUE September 19 (short reaction paper) Due 5.00 p.m</li> </ul>
Week 3 9/24	Measuring Population Health	<ul> <li>Braveman et al., 2017; Stoto, 2014; Regions Implementation Plans; CDC Wonder; Country Health Rankings</li> </ul>	<ul> <li>Bring Laptop to Class; Using Health Data</li> <li>Assignment # 2 (Describe your population) Due September 26 5.00 p.m.</li> </ul>
Week 4 10/01	Social Determinants of Health	<ul> <li>Phelan et al. 2010; Galae et al. 2011; Center for Outcomes Research and Education</li> </ul>	Assignment #3 Due Oct 3 5:00 p.m.
Week 5 10/08	Social Determinants of Health	Ted Talk; Kreiger 2005; Agency for Healthcare Research and Quality	
Week 6 10/15	Engaging Stakeholders	AHA, 2013; Allina Backyard	<ul> <li>Assignment # 4 Due October 15 5:00 p.m.</li> </ul>
Week 7 10/22	Leading Innovations in Population Health	• Kindig, 2018; Begun, 2017	Final Integrated Paper Due 10/23

# Week 1 (9/10): Introduction to Population Health

#### Learning Objectives:

- 1. Explain evolution of population health and variations in definitions
- 2. Explain the functions of public health
- 3. Differentiate between public health and population health
- 4. Review the application of population health under health reform

#### Required:

Christianson, Jon. 2016. *Population Health, The Triple Aim, and the Health Effects of Social Services*. Medica Research Institute. Available at <u>https://www.ajmc.com/contributor/medica-research-institute/2016/12/population-health-the-triple-aim-and-the-health-effects-of-social-services</u>

- Kindig, David and Greg Stoddart. 2003. "What is Population Health?" *American Journal of Public Health* 93(3):380-383.
- Stoto, Michael A. 2013. *Population Health in the Affordable Care Act Era*. Academy Health Available at <u>http://www.academyhealth.org/files/publications/files/AH2013pophealth.pdf</u>.

Sharfstein, Joshua M. 2014. "The Strange Journey of Population Health." *Milbank Quarterly* 92(4): 640-643.

#### Optional:

- Alley, Dawn E., Chisara N. Asomugha, Patrick H. Conway, and Darshak M. Sanghavi. 2016. "Accountable Health Communities--Addressing Social Needs through Medicare and Medicaid." *New England Journal of Medicine* 374(1), 8-11.
- Berwick, D M., T. W. Nolan, and J. Wittington. 2008. "Triple Aim: Care, Health and Cost." *Health Affairs* 27(3):759-769.

Kindig, David A. 2007. "Understanding Population Health." *Milbank Quarterly* 85(1):139-161.

## Week 2 (9/17): Describing A Population

#### Learning Objectives:

- Compare variation in how populations may be defined
- Identify appropriate denominators to describe populations
- Identify and interpret data to describe social and economic characteristics of populations

Goldman, T. R. 2014. "Building Healthy Communities Beyond the Hospital Walls." *Health Affairs* 33(11):1887-1889.

#### Case Study:

• <u>2015 Regions Hospital Community Health Needs Assessment (CHNA)</u> Available at https://www.regionshospital.com/rh2/about-us/community-benefit/index.html

#### Prior to Class Become Familiar With:

The United States Census Bureau. American Fact Finder. Provides demographic information about communities across the US. Available at https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml.

#### Optional:

Pol, Louis G., and Richard. K. Thomas, 2013. "Population Composition" (Chapter 4). In *The Demography of Health and Healthcare*. New York: Springer.

# Week 3 (9/24): Measuring Population Health and Health Inequity

#### Learning Objectives:

- Identify leading indicators of population health
- Identify leading determinants of population health
- Define health equity
- Use data to describe population health outcomes and inequities in outcomes

Braveman, P, E. Arkin, et al. 2017. *What is Health Equity? And What Difference Does a Definition Make?* Princeton, NJ: Robert Wood Johnson Foundation.

Stoto, Michael A. 2014. "Population Health Measurement: Applying Performance Measurement Concepts in Population Health Settings." *Frontiers in Public Health Services & Systems Research* 2(4):Art. 6. Available at <a href="http://repository.edm-forum.org/cgi/viewcontent.cgi?article=1132&context=egems">http://repository.edm-forum.org/cgi/viewcontent.cgi?article=1132&context=egems</a>

Briefly Review Material about Leading Health indicators for Healthy People 2020. Available at <u>https://www.healthypeople.gov</u>

#### Case Study:

Regions Hospital Community Health Needs Assessment Implementation Plan. Available at <a href="https://www.regionshospital.com/ucm/groups/public/@hp/@public/documents/documents/entry\_183218.pdf">https://www.regionshospital.com/ucm/groups/public/@hp/@public/documents/documents/entry\_183218.pdf</a>

Regions Hospital Community Health Implementation Plan 2017 Progress Report. Available at <a href="https://www.regionshospital.com/ucm/groups/public/@hp/@public/documents/documents/entry\_200214.pdf">https://www.regionshospital.com/ucm/groups/public/@hp/@public/documents/documents/entry\_200214.pdf</a>

#### Prior to Class Become Familiar With:

- CDC Wide-ranging ONline Data for Epidemiologic Research (CDC WONDER) is a web-based data base of public health statistics. Available at <u>https://wonder.cdc.gov</u>.
- Robert Wood Johnson Foundation. 2017 County Health Rankings. Available at http://www.countyhealthrankings.org/app/minnesota/2017/rankings/hennepin/county/outcomes/overall/snapsh ot.

#### **Optional:**

- Etches, Vera, John Frank, Erica Di Ruggiero, and Doug Manuel. 2006. "Measuring Population Health: A Review of Indicators." *Annual Review of Public Health* 27:29-55.
- Institute of Medicine. 2013. *Toward Quality Measures for Population Health and the Leading Health Indicators*. Washington D.C: National Academy of Sciences.

#### Week 4 (10/1): Social Determinants of Health

#### Learning Objectives:

- Describe the theory of social conditions as fundamental causes of health
- Identify major social determinants of health
- Develop logic models linking social determinants to outcomes
- Explain strategies for addressing social determinants

- Phelan, Jo C., Bruce G. Link, and Parisa Tehranifar. 2010. "Social Conditions as Fundamental Causes of Health Inequalities: Theory, Evidence and Policy Implications." *Journal of Health and Social Behavior* 51(S):S28-S40.
- Galae, Sandro, Melissa Tracy, Katherine J. Hogatt, Charles DiMaggio, and Adam Karpati. 2011. "Estimated Deaths Attributable to Social Factors in the United States." *American Journal of Public Health* 101: 1456-1465.

## Case Study:

The Center for Outcomes Research and Education. Integrating Housing and Health. A Health-Focused Evaluation of the Apartments at Bud Clark. Available at <a href="http://media.oregonlive.com/portland\_impact/other/Verified%20BCC%20report%20with%20appendix.pdf">http://media.oregonlive.com/portland\_impact/other/Verified%20BCC%20report%20with%20appendix.pdf</a>

## Week 5 (10/8): Social Determinants of Health (continued)

## Learning Objectives:

- Understand structural versus individual conceptualizations of social determinants
- Identify major social determinants of health
- Develop logic models linking social determinants to outcomes
- Understand strategies for addressing social determinants

Watch TED talk by Dr. Richi Manchanda "UpStream Doctors" prior to class Available at: <u>https://www.ted.com/talks/rishi\_manchanda\_what\_makes\_us\_get\_sick\_look\_upstream</u>

Krieger, Nancy. 2005. "Stormy Weather: Race, Gene Expression, and the Science of Health Disparities." American Journal of Public Health, 95:12:2155-2180.

## Case Study:

Agency for Healthcare Research and Quality. Church-Health System Partnership Facilitates Transitions From Hospital to Home for Urban, Low-Income African Americans, Reducing Mortality, Utilization, and Costs Available at: https://innovations.ahrq.gov/profiles/church-health-system-partnership-facilitates-transitionshospital-home-urban-low-income

## Week 6 (10/15): Engaging Stakeholders

#### Learning Objectives:

- Identify Strategies for Identifying Key Stakeholders
- Evaluate Challenges to Achieving Engagement

American Hospital Association. 2013. *Engaging Health Care Users: A Framework for Healthy Individuals and Communities*. Chicago: American Hospital Association, 2012 Committee on Research. Available at http://www.aha.org/research/cor/content/engaging\_health\_care\_users.pdf

#### Case Study:

The Allina Backyard Initiative. A Community-Corporate Partnership to Improve Health. Available at <u>https://www.allinahealth.org/About-Us/Community-involvement/Initiatives-and-programs/The-Backyard-Initiative/Publications/</u>

# Optional:

Robert Wood Johnson Foundation. 2014. *Hospital-Based Strategies for Creating a Culture of Health*. Available at http://www.hpoe.org/Reports-HPOE/hospital\_based\_strategies\_creating\_culture\_health\_RWJF.pdf

Guest Speaker: To be determined

## Week7 (10/22): Leading Interventions to Improve Population Health

Learning Objectives:

- Specify barriers to implementing population health interventions
- · Identify leadership characteristics to reduce barriers
- Design population health intervention

Begun, James W., and Sandra Potthoff. 2017. Moving Upstream in U.S. Hospital Care Toward Investments in Population Health. *Journal of Healthcare Management* 62, 343-353.

Kindig, David A., and Bobby Milstein. 2018. A Balanced Investment Portfolio for Equitable Health and Well-Being is an Imperative and Within Reach. *Health Affairs* 37: 579-584.

Optional:

Corrigan, Janet M., and Elliott S. 2014. Accountable Health Communities: Insights From State Health Reform Initiatives. Retrieved from <u>http://tdi.dartmouth.edu/research/</u> website: <u>http://tdi.dartmouth.edu/research/evaluating/health-system-focus/accountable-care-organizations/accountable-health-communities:-insights-from-state-health-reform-initiatives</u>

Northeastern University Institute on Urban Health Research and Practice. March 2016. *Population Health Investments by Health Plans and Large Provider Organizations – Exploring the Business Case.* Available at <u>http://www.northeastern.edu/iuhrp/wp-content/uploads/2016/05/PopHealthBusinessCaseFullRpt-5-1.pdf</u>

Guest Speaker: To be determined

# SPH AND UNIVERSITY POLICIES & RESOURCES

The School of Public Health maintains up-to-date information about resources available to students, as well as formal course policies, on our website at <a href="http://www.sph.umn.edu/student-policies/">www.sph.umn.edu/student-policies/</a>. Students are expected to read and understand all policy information available at this link and are encouraged to make use of the resources available.

The University of Minnesota has official policies, including but not limited to the following:

- Grade definitions
- Scholastic dishonesty
- Makeup work for legitimate absences
- Student conduct code
- Sexual harassment, sexual assault, stalking and relationship violence
- Equity, diversity, equal employment opportunity, and affirmative action
- Disability services
- Academic freedom and responsibility

Resources available for students include:

- Confidential mental health services
- Disability accommodations
- Housing and financial instability resources
- Technology help
- Academic support

# **EVALUATION & GRADING**

**Assignment 1**: **Defining Population Health**: Write a short reaction paper discussing how you define population health from the perspective of the health care system based on the readings, lecture and class discussion from Week 1. What are the strengths and limitations of your definition?

Assignments 2-4 build on one another to produce a final paper that applies the major components of a population health approach to improving health for a population (a randomly chosen county in Minnesota). You have the choice to do these assignments individually or in pairs.

Assignment 2: Identify a Population: Students will randomly choose a county in Minnesota that will constitute the population they analyze for the remainder of the course. Describe the county that you will focus on for the remainder of the class. What is the denominator? What are the major social and economic characteristics of the population that you believe are important for health? Present data about four socio-demographic characteristics. How does your population compare to the state? What are the major health organizations responsible for health outcomes for your population? Students working in pairs will be required to choose six indicators of health. Maximum 400 words for individual work; 500 words for pairs (not including tables, figures or references)

Assignment 3: Describe the Health Needs of Your Population. Using CDC Wonder, County Health Rankings or other reliable data sources describe the health of your population. Choose three indicators of health and show how your population compares to the state population? Is there evidence of inequities in these outcomes? Students working in pairs will be required to choose six indicators of health. Maximum 400 words for individual work; 500 words for pairs

**Assignment 4: Describe a social determinant** that should be targeted to improve population health for ONE of the indicators you selected in Assignment 3. Develop a logic model showing how you believe that determinant is linked to the health outcome. Suggest a possible intervention. **Students working in pairs will choose 2 possible interventions**. Maximum 1000 words for individual work; 1500 words for pairs.

**Assignment 5: Integrated Paper.** The final paper is a compilation of Assignments 2-5 into a single paper. Revise these sections based on what you learned later in the class, or based on the instructor's feedback. In addition, add a section on the potential stakeholders you need to engage to implement the intervention discussed in Assignment 4 (maximum 300 additional words).

# Students working in pairs will be asked to rate their own and their partners effort on each project. The final grade in the class will be weighted by the average effort.

#### **Class & Discussion Forum Participation:**

You are expected to come to class having read the material and being prepared to participate in discussion. To help that process, you are required to submit on the course Moodle site, a discussion question or questions that you would like covered in the next day of class; do this for at least 4 of the 7 weeks of class. You may pose a new question, or add to an existing discussion thread. Questions must be posted by 8:00 pm the night before class. We won't be able to address all your questions in class, but knowing what students are interested in or having difficulty understanding will help me facilitate group discussion. (Class discussion and forum participation make up 10% of your grade – see end of this document for grading rubric).

#### **Grading Scale**

The University uses plus and minus grading on a 4.000 cumulative grade point scale in accordance with the following, and you can expect the grade lines to be drawn as follows:

% In Class	Grade	GPA
93 - 100%	А	4.000
90 - 92%	A-	3.667
87 - 89%	B+	3.333
83 - 86%	В	3.000
80 - 82%	В-	2.667
77 - 79%	C+	2.333
73 - 76%	С	2.000
70 - 72%	C-	1.667
67 - 69%	D+	1.333
63 - 66%	D	1.000
< 62%	F	

- A = achievement that is outstanding relative to the level necessary to meet course requirements.
- B = achievement that is significantly above the level necessary to meet course requirements.
- C = achievement that meets the course requirements in every respect.
- D = achievement that is worthy of credit even though it fails to meet fully the course requirements.
- F = failure because work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I (Incomplete).
- S = achievement that is satisfactory, which is equivalent to a C- or better
- N = achievement that is not satisfactory and signifies that the work was either 1) completed but at a level that is not worthy of credit, or 2) not completed and there was no agreement between the instructor and student that the student would receive an I (Incomplete).

Evaluation/Grading Policy	Evaluation/Grading Policy Description	
Scholastic Dishonesty, Plagiarism, Cheating, etc.	You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis (As defined in the Student Conduct Code). For additional information, please see <a href="https://z.umn.edu/dishonesty">https://z.umn.edu/dishonesty</a> The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: <a href="https://z.umn.edu/integrity">https://z.umn.edu/integrity</a> .	
Late Assignments	Late assignments are penalized 10% per day	
Attendance Requirements	Students are expected to attend all classes. Please inform the instructor by email if you expect to miss a class, as professional courtesy.	
Extra Credit	All students are evaluated on the basis of the same assignments – there is no extra credit work	
Intellectual Property of Instructors' Material	The MHA program prohibits any current student from uploading MHA course content (e.g., lecture notes, assignments, or examinations for any PUBH 65XX or PUBH 75XX courses) created by a University of Minnesota faculty member, lecturer, or instructor to any crowdsourced online learning platform.	

CEPH KNOWLEDGE DOMAINS

Knowledge Domain	Course Learning Objectives	Assessment Strategies
Explain public health history, philosophy, and values.	Explain evolution of population health and variations in definitions	Assignment #1
	Differentiate between public health and population health	
	Review the application of population health under health reform	
Identify the core functions of public health and 10 Essential Services <sup>i</sup> .	Explain evolution of population health and variations in definitions	Assignment #1
	Explain the functions of public health	
	Differentiate between public health and population health	
Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.	Identify leading indicators of population health	Assignment #2, #3 and Integrated Paper
	Use data to describe population health outcomes and inequities in outcomes	
	Compare variation in how populations may be defined	
	Identify appropriate denominators to describe populations	
	Identify and interpret data to describe social and economic characteristics of populations	

List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program.	Identify leading indicators of population health Identify leading determinants of population health Define health equity Use data to describe population health outcomes and inequities in outcomes Identify and interpret data to describe social and economic characteristics of populations	Assignment # 3, Integrated Paper
Explain the critical importance of evidence in advancing public health knowledge.	Use data to describe population health outcomes and inequities in outcomes Identify and interpret data to describe social and economic characteristics of populations Develop logic models linking social determinants to outcomes	Assignment #2, #3, #4, Integrated Paper

Explain biological and genetic factors that affect a population's health.	Describe the theory of social conditions as fundamental causes of health Identify major social determinants of health Develop logic models linking social determinants to outcomes Explain strategies for addressing social determinants	Assignment # 3, Integrated Paper
Explain the social, political, and economic determinants of health to population health and health inequities.	Describe the theory of social conditions as fundamental causes of health Identify major social determinants of health Develop logic models linking social determinants to outcomes Explain strategies for addressing social determinants Define Health Equity	Assignment #3, #4, Integrated Paper

# NCHL HEALTHCARE LEADERSHIP COMPETENCIES FOR CAHME ACCREDITATION PURPOSES

Competency	Course Learning Objectives	Assessment Strategies
Healthcare delivery, financing and public health knowledge	Explain evolution of population health and variations in definitions	Assignment #1
	Differentiate between public health and population health	
	Explain the functions of public and population health	
	Review the application of population health under health reform	
Population health measurement and management	Compare variation in how populations may be defined	Assignments #2-4; Final Integrated Paper
	Identify appropriate denominators to describe populations	
	Identify and interpret data to describe social and economic characteristics of populations	
Community Collaboration	Identify Strategies for Identifying Key Stakeholders	Final Integrated Paper
	Evaluate Challenges to Achieving Engagement	

Quantitative analyses and performance measurement	Compare variation in how populations may be defined Identify appropriate denominators to describe populations Identify and interpret data to describe social and economic characteristics of populations Use data to describe population health outcomes and inequities in outcomes	Assignments #2-3; Final Integrated Paper
Written communication	Communicate clearly and concisely in writing and orally	Assignments #1-4; Final Integrated Paper; class and on-line participation

<sup>&</sup>lt;sup>i</sup> See <u>https://www.cdc.gov/stltpublichealth/publichealthservices/essentialhealthservices.html</u> for more detail.