Qualifying Exam
Population and Health
Spring 2026

To complete the exam, you must answer one question from each of the three sections below in an essay format. Each answer should be a self-contained essay approximately 8–10 pages long (i.e., 2,000–2,500 words). Although you must cite to referenced work in each essay, one comprehensive bibliography for all three questions will be sufficient. You may consult materials from the reading list you've been provided, as well as any other scholarly sources you've read during the exam period.

Please make sure to label clearly which question you're responding to.

Section One, Answer A or B:

A. Age, Period, Cohort analyses are critical to the study of health and demography.
    a. First, define each component (age, period, and cohort) and describe the main challenge with APC data and analyses.
    b. Choose and explain two methodological strategies researchers employ when handling APC data and analyses. Discuss the pros and cons of each strategy.
    c. Now, consider a researcher has a representative sample of the U.S. population ages 18-65, who were surveyed on their health status each year from 2019-2024. Therefore, this researcher has health information for participants across stages of the COVID-19 pandemic (pre, during, post), as individuals age, for a range of birth cohorts. Discuss how each component of APC (age, period, and cohort) may pattern trends in health status for this population.

B. Various life course theories (e.g., cumulative inequality, cumulative disadvantage, stress process) have been employed to understand the long-term impacts of childhood circumstances on health.
    a. First, describe what is meant by the "life course perspective." Your discussion should address the key tenants of this perspective.
    b. Explain cumulative inequality theory and describe how this theory builds on (or does not build on) cumulative disadvantage theory and the broader life course perspective.
    c. Now, craft an argument for why childhood circumstances have an impact on adult health by leveraging the theories and perspectives discussed in your above responses. Explain whether childhood experiences matter more or less than adult experiences for shaping adult health. Your response should include at least some

examples of published works that have found evidence of the impact of childhood circumstances on life course health.

Section Two, Answer C or D:

C. Fertility rates across high-income countries have fallen below replacement level, prompting concerns about demographic sustainability and policy responses.
    a. Low fertility is not uniform. Some countries have stabilized near replacement while others have fallen to "lowest-low" levels. What factors help explain cross-national variation in fertility rates?
    b. Research documents a persistent gap between the number of children people say they want and the number they actually have. What explains this gap between fertility intentions and outcomes, and what are its implications for how we interpret low fertility?

D. International migration is shaped by forces operating at multiple levels, from global political-economic structures to individual decision-making.
    a. Summarize the major theoretical approaches to explaining international migration, distinguishing between macro-level, meso-level, and micro-level explanations. Which approach(es) do you find most compelling for understanding contemporary migration patterns, and why?
    b. Discuss how migration is linked to the life course. At what stages of life is migration most common, and how do life course transitions (e.g., education, family formation, retirement) shape migration decisions and outcomes?

Section Three, Answer E or F:

E. There are multiple theoretical frameworks for understanding health disparities, including 1) fundamental cause theory, 2) cumulative inequality theory, 3) structural racism, and 4) intersectionality. While these frameworks have advanced our understanding of health inequalities, they also face conceptual and methodological challenges.
    a. Identify and explain at least **one** significant limitation for **three** of these theoretical frameworks. Consider issues such as, challenges in empirical testing, potential contradictions between frameworks, or gaps in what these theories can explain.
    b. Drawing on specific readings, discuss how current measurement approaches may constrain our ability to fully test or apply these theories. Consider the role of categorization systems (e.g., race, gender), the use of self-reported versus biomarker data, or the temporal dimensions of health inequality.

F. There are fundamental measurement challenges in population health research, including how we categorize race, assess self-rated health, and integrate biomarkers into social research. These measurement decisions are not merely technical—they shape what questions we can ask, what patterns we can detect, and ultimately what we understand about health disparities.

    a. Select **two specific measurement challenges** for population health disparities research (e.g., multiracial categorization, self-rated health validity, biomarker interpretation). For each, explain the core measurement problem and why it matters for health disparities research. Consider: What assumptions are embedded in current measurement approaches? What populations or experiences might be rendered invisible?
    b. Explain how these measurement limitations constrain our ability to test or apply theories of health disparities. For example: How does the way we measure race affect our ability to study structural racism as a fundamental cause? How do self-report measures limit our understanding of cumulative inequality? How might biomarker interpretation vary across populations with different stress exposures?