Applied Demography\textsuperscript{1}  
90-792

This course will cover the application of demographic theory and modeling to education, health, criminal justice, labor markets, housing and urban/regional and national change (including migration). Two alternative topics may also be substituted, depending on class interests: 1) Population & Politics and 2) Population & Environment.

Requirements

1) Bi-weekly identification of a population policy issue located in current sources: newspapers, magazines, government reports, web (brief write-up accompanying "article") or mini assignment pertaining to the readings or class discussion. 10%

2) Brief data analysis using publicly accessible data (e.g., U. S. Census, National Center for Educational Statistics, international data) 30%

3) Main Exercises/Problem Sets in one to three of the Main Areas 60%


I. Population and Education

A. School District Student Projections


\textsuperscript{1} Note: The material to be covered in class will be thoroughly examined. If time does not permit coverage of all sections of the syllabus, selected readings or areas will be deleted to ensure adequate attention to those that are covered.
B. Student Trajectories and Outcomes—What is the 4-year high school graduation rate in the US?


II. Population and Health

A. Epidemiology

L. Gordis. Epidemiology. Chapters 1, 6, 16, 19.

Chapter 16: “Identifying the Roles of Genetic and Environmental Factors in Disease Causation”, pp 240-261.
M. Szklo and F. J. Nieto, *Epidemiology Beyond the Basics*, 2007, Chapters 1,3,10

Chapter 1: “Basic Study Designs in Analytical Epidemiology”, p. 3-42.
Chapter 3: Measuring Associations Between Exposure and Outcome”, p. 77-103

D. E. Lilienfeld and P. D. Stolley, *Foundations of Epidemiology* 1994, Chapters 1, 2,3,10, 11.

Chapter 1: Laying the Foundation: Epidemiologic Approaches to Disease”, p. 3-21.
Chapter 3: “Selected Epidemiologic Concepts of Disease”, p. 36-58.

B. Infectious Diseases


Selected readings on (1) the *HIV/AIDS Epidemic*—its initial “discovery/incidence” in the US, attempts to measure it, particularly in Africa, and attempts to “cure” it and (2) the *Ebola epidemic* in West Africa; these readings will deal with developing science, medicine and policy.
C. Long Term Behavioral Impacts: Smoking


III. Population and the Criminal Justice System

A. Criminal Justice System Flows


B. Criminal Careers


IV. Population and Labor Markets

A. Internal Labor Markets/Regional National Labor Markets


S. Stewman 2016, Vacancy Chains and the Dynamics of the US Labor Market"

B. Career Trajectories


V. Population and Housing

A. Homelessness and Homeownership


B. Mobility/Migration


VI. Population and Urban Areas/Regional Change/International Migration

A. Urban Areas


C. International Migration


VII. Population & Politics


N. Silver, *The Signal and the Noise: Why So Many Predictions Fail—but Some Don’t*, Chapter 1 “A Catastrophic Failure of Prediction” and Chapter 2 “Are You Smarter Than a Television Pundit?”