SEX, DEATH, AND DATA

Sociology/Demography C126 UC Berkeley, Fall 2018 MWF 11-12, Northgate 105

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Overview:

Our most intimate moments—of birth, marriage, illness, sex, and death—are at the same time our most common, and even our most statistically predictable. New forms of data continue to make these regularities in vital rates clearer than ever. Using population data, we can address questions like: "Why are death rates so different for men and women?" and "Can we really know how often people have sex?" and "How do changes in birth rates matter for social life?" This course provides a broadly accessible introduction to social demography through an examination of some of the social, political, and ethical issues related to death and illness, sex and birth. Over the course of the semester, we will addresses three major questions:

- 1. How do we create knowledge about population?
- 2. How do birth and death rates, along with population size and structure matter—for the economy, for politics, for social structure, for culture?
- 3. Why are population rates so stable, despite enormous individual variation?

At the end of this course, you will have a basic toolkit for understanding statistical data about birth and death, and for thinking about population issues as they relate to contemporary life.

Format and practicalities:

This course is primarily lecture-based, although I will encourage your active participation as much as possible. This course covers a body of material intimately related to current issues in public policy. Smart & well-informed people disagree about these issues. There is a corpus of facts, theories, and approaches that I expect you to master, but also considerable scope for reflection, different opinions, and debate. To be part of the discussion, it is critical that you do the assigned reading in advance of class, and that you engage with each other in a respectful manner.

What readings are required? All readings will be available electronically though bCourses at http://bCourses.berkeley.edu, under the educational fair use policy of US copyright law. I will generally upload my lecture slides the morning of class to bCourses as well.

How to get your questions answered: The best time and place for questions about the material is in class. If you are uncomfortable asking questions during class, I am happy to address your questions during

office hours. More personal questions or concerns are also best addressed in office hours. Email is the "medium of last resort": I check email not more than once a day, and cannot always respond right away.

Timely completion of assignments: Work is due in class according to the schedule in the syllabus, and will not be accepted late <u>under any circumstances</u>.

Berkeley honor code: We all participate in maintaining our honor code: "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others." This code defines how we live and work together. When I lecture, I endeavor to always cite my sources, identify places where experts disagree, and tell you honestly when I do not know the answer to a question. I intend to treat you with the dignity and respect you deserve. Your obligation is the same: treat your fellow students and me with respect, do your own work on assignments and exams, and cite your sources. If at any point you have any questions about how the honor code applies to a given context, or how best to fulfill your obligations as a member of the UC Berkeley community, please feel free to ask me.

Accommodations: I am committed to making my class accessible to all students regardless of religious practice, disability status, or any other situation. If there are any ways in which you require accommodation (say, for religious observance or to have the readings scanned into text-to-voice software, or for any other reason), please let me know and I will work with you. Of course, the sooner you let me know, the easier it will be to accommodate you. Information about disability accommodation at UC Berkeley is available at *http://dsp.berkeley.edu*.

Specific course requirements:

Students will be expected to:

- ✓ **Read the assigned material** by the class period indicated in the syllabus.
- ✓ **Demonstrate engagement and ongoing learning** by participating in class.
- ✓ Demonstrate mastery of the course material through an in-class midterm and final exam. The exams will be a combination of short-answer and essay questions. The final will be cumulative, but will emphasize the material in the second half of the course. You will receive a study guide prior to each exam.
- Complete six homework assignments related to the class material, as indicated in the syllabus. Homework will not be accepted late under any circumstances. The lowest grade will be dropped, in recognition of the fact that stuff happens and sometimes it is impossible to turn in an assignment on time.

Grades will be based on:

- ✓ Mid-term exam: 25%
- ✓ Final exam: 25%
- Homework #1 through #6: 10% each, with the lowest score dropped (therefore total of 50%)

Final grades will generally follow the usual distribution (ie. 94% is an A, 90% is an A-, etc.). However, grade cut-points may be altered slightly so that they fall at natural breaks in the point distribution (for example, 89%-91% may be a B+ or an A-, depending on the overall distribution of grades).

Regrading policy: If you believe that a grade on an assignment or exam question is inappropriate or unfair, submit the original paper with a written description of what you would like reconsidered. Please note that a regrade may result in either an increase or a decrease in your score.

List of homework assignments for the semester

#1: Demographic Transition, Due in class on Wed, September 5th

Look at the cool graph at:

https://ourworldindata.org/wp-content/uploads/2013/05/ourworldindata_demographic-transition-5countriesi.png

In about 500 words, what do you see in these five different histories of fertility and mortality decline? What is different about the bottom three from the top two? Why do the time series start at different times, and does that matter for anything?

#2: Age-sex Pyramids, Due in class on Wednesday, September 19th

Go to:

https://www.census.gov/population/international/data/idb/informationGateway.php

Select a country and produce Population Pyramid Graphs for 1985 and 2015. In about 400 words, describe what you see on the two graphs. What are the similarities and differences? What can you infer about the country from the graphs?

#3: Mortality Selection, Due in class on Wednesday, October 10th

Look at this graph of US death rates by age:

https://en.wikipedia.org/wiki/File:Mortality_by_age.png

Describe what you see on the graph overall. Note especially the scale. Now focus on the far right side of the graph, at the oldest ages. What happens out there? Using what you know about population selection, offer one or more possible explanation(s) for this. Can you think of any way to test your idea(s)? What other kinds of data would be useful in knowing if you are right? This assignment should be about 500 words long overall.

#4: Fertility and Mortality, Due in class on Monday, October 22nd

Discuss the similarities and differences between measures of fertility and mortality (for example, crude rates, TFR vs. Life expectancy, etc.). Then discuss the similarities and differences in data sources. In

your own view, of which data should we be most confident? Which are most likely to be recast with new technologies for data collection?

#5: Popular Article, Due in class on Monday, November 5th

Find an article from a reliable popular news source that addresses some aspect of sex, death, and data. Tersely describe the main point of the article. Then use tools you have learned in this class to deepen the analysis, draw it into question, make it more nuanced, or point out some likely consequences. The whole thing should be about 500 words.

#6: Marriage squeezes, Due in class on Monday, November 26th

Go back to:

https://www.census.gov/population/international/data/idb/informationGateway.php

(This is the same website you used for assignment #2). Again make two Population Pyramids, for 1985 and 2015. You do not have to use the some country as before, but you may if you like. Look at the 1985 pyramid. Are there any (common) marriage systems under which there be marriage squeezes? What kinds of marriage systems could work with this population structure? Now look at 2015. Has anything changed? How might marriage systems have changed, if at all, in the intervening time? Again, this should be about 400 words. **Schedule of activities:** **The following represents my current plans and objectives. As we go through the semester, it may be necessary or desirable to make changes to this schedule, add or change assigned readings, etc. That is a normal part of the teaching process. If revisions are made, they will be announced in class and posted on bCourses.**

Date	In Class	Read in advance	Turn in
Wed 8/22	Introduction		
Fri 8/24	Two demographic regimes (metabolism); Modes of evidence		
Mon 8/27	Demographic transitionwhat happened?	Lee, Ronald. 2003. "The Demographic Transition: Three Centuries of Fundamental Change." <i>Journal of Economic</i> <i>Perspectives</i> 17(4): 167–90.	
Wed 8/29	Demographic transitionwhy? (Homeostasis)	Reher, D. "Back to the Basics: Mortality and Fertility Interactions during the Demographic Transition." Continuity and Change 14, no. 1 (1999): 9-31.	
Fri 8/31	No Class		
Mon 9/3	No Class LABOR DAY		
Wed 9/5	Population pyramids and momentum	Blue, L. and Espenshade, T. J. (2011), Population Momentum Across the Demographic Transition. Population and Development Review, 37: 721-747.	Assignment #1: Demographic transition
Fri 9/7	Population size and change, kinds of measures		
Mon 9/10	Demographic transition and the future?	Dorling, Danny and Stuart Gietel-Basten, 2018. Population "Explosion". Chapter 4 in Why Demography Matters. Polity Press. Pp. 71-97.	
Wed 9/12	Population composition.	Hout, M., Greeley, A., & Wilde, M. J. (2001). The demographic imperative in religious change in the United States. <i>American Journal of Sociology</i> , 107(2), 468-500.	
Fri 9/14	Selection		

Mon 9/17	Selection part 2, and Composition	Bethlehem, J. (2010), Selection Bias in Web Surveys. International Statistical Review, 78: 161-188.	
Wed 9/19	How do we gather data on death? How do we measure mortality?	Feehan, D.M., Mahy, M. & Salganik, M.J. 2017. "The Network Survival Method for Estimating Adult Mortality: Evidence From a Survey Experiment in Rwanda" Demography. 54: 1503.	Assignment #2: Age-Sex Pyramids
Fri 9/21	No Class		
Mon 9/24	The epidemiologic transition	Omran, Abdel. (1977) The Epidemiologic Transition: A Theory of the Epidemiology of Population Change. Milbank Memorial Fund Quarterly 49:: 509-37.	
Wed 9/26	Infectious deaths		
Fri 9/28	Infectious deaths, part 2	A. J. McMichael. 2004. Environmental and social influences on emerging infectious diseases: past, present and future. Phil. Trans. R. Soc. Lond. B 2004 359 1049-1058.	
Mon 10/1	Midterm review		BRING QUESTIONS!
Wed 10/3	Midterm		MIDTERM IN CLASS
Fri 10/5	No Class		
Mon 10/8	Social inequality as a cause of differential death rates	Hummer, R. A., & Hernandez, E. M. (2013). The Effect of Educational Attainment on Adult Mortality in the United States*. Population Bulletin, 68(1), 1-16.	
Wed 10/10	The Hispanic Paradox	Palloni, Alberto, and Elizabeth Arias. "Paradox Lost: Explaining the Hispanic Adult Mortality Advantage." Demography 41, no. 3 (August 2004): 385–415.	Assignment #3: Mortality Selection
Fri 10/12	Rising White mortality?	Case, Anne and Angus Deaton (2015). Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. PNAS. 112(49):15078-15083.	
Mon 10/15	Effects of mortality differentials for social inequality: example of social security		

Wed 10/17	Measuring fertility, proximate determinants	Bongaarts, John. 1978. A Framework for Analyzing the Proximate Determinants of Fertility. Population and Development Review 14: 105-32.	
Fri 10/19	Contraception and Proception	Kusunoki, Y. & Upchurch, D.M. 2011. Contraceptive Method Choice Among Youth in the United States: The Importance of Relationship Context. Demography 48: 1451.	
Mon 10/22	New reproductive technologies		Assignment #4: Mortality and Fertility
Wed 10/24	Fertility Postponement and its consequences	Schmidt et al. 2012 Demographic and Medical Consequences of the postponement of parenthood. Human Reproduction Update Vol 18	
Fri 10/26	No Class		
Mon 10/29	The intergenerational interval, population size, and social change	Ryder, N. 1965. Cohort as a concept in the study of social change. American Sociological Review. 30(6):843-861.	
Wed 11/31	How do we gather data on sex, sexual practice, and gender identities?	Houle et al. (2016) "Let's Talk About Sex, Maybe." Field methods. 28(2): 112—132.	
Fri 11/2	History of Sex ResearchKinsey to Laumann	A chapter from: Kinsey et al. et al. 1953. Sexual Behavior in the Human Female.	
Mon 11/5	History of Sex ResearchLaumann forward		Assignment #5: Popular Article
Wed 11/7	What do we know about sexuality and sexual behavior in the US and cross-nationally?	Wellings et al. 2006. Sexual and reproductive health 2 - Sexual behaviour in context: a global perspective. Lancet 368(9548): 1706-1728.	
Fri 11/9	Fetal loss & abortion	Rossier, C. (2003), Estimating Induced Abortion Rates: A Review. Studies in Family Planning, 34: 87-102.	
Mon 11/12	No classVeteran's Day		

Wed 11/14	The sex ratio at birth & sex-selective abortion	Miller, B. D. (2001), Female Selective Abortion in Asia: Patterns, Policies, and Debates. American Anthropologist, 103: 1083-1095.	
Fri 11/16	Marriage squeezes, with special reference to China	Guilmoto, C.Z. 2012. Skewed Sex Ratios at Birth and Future Marriage Squeeze in China and India, 2005–2100. Demography 4 (1)9: 77-100.	
Mon 11/19	Is demography destiny?	Dorling, Danny and Stuart Gietel-Basten, 2018. Chapter from: <u>Why Demography Matters.</u> Polity Press.	
Wed 11/21 and Fri 11/23	No ClassThanksgiving		
Mon 11/26	Summary lecture		Assignment #5: Marriage Squeezes
Wed 11/28	Final review		BRING QUESTIONS!
Fri 11/30	FINAL EXAM		FINAL IN CLASS

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