# Sex, Death, and Data

# Sociology/Demography C126 UC Berkeley, Fall 2017 MWF 11-12, LeConte 2

Professor Jennifer Johnson-Hanks Email: <u>johnsonhanks@berkeley.edu</u> Office Hours: Friday 9:15-10:45 in 484 Barrows (most weeks) and Mon 2:15-3:15. SIGN UP ON THE DOOR IN ADVANCE

#### **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:

- How do we create knowledge about population? (What are the sources of data? How do we know whether data are reliable? What is the relationship between demographic data and models? How do we evaluate different explanations of data?)
- 2. How do birth and death rates, along with population size and structure matter—for the economy, for politics, for social structure, for culture? (What things can they affect directly? Indirectly? Through what processes?)
- 3. What is the relationship between what individuals want, fear, or try to achieve and aggregatelevel demographic patterns? (Why are population rates so stable, even though individuals may want widely divergent things?)

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. Thus, while there is a corpus of facts, theories, and approaches that I expect you to master, there is 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. We learn through conversation, and that requires each of us to listen with an open mind.

What readings are required? All the **required** readings are listed in this syllabus and will be available electronically though bCourses at <a href="http://bCourses.berkeley.edu">http://bCourses.berkeley.edu</a>. There is no reader or textbook to buy for this class. I will post the **optional** readings to bCourses as I have time. My experience is that few people choose to do them, but they are there for the most eager students. 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 do not understand something, chances are good that some of your classmates do not understand it either, and asking during class can be a service to them. 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. I have set aside this time for you, and I am glad to see you there. Email should not be used for questions about the material, and indeed is the "medium of last resort." I check email not more than once a day, and cannot always respond right away. If you have an important issue, please come to office hours.

*Timely completion of assignments*: Work is due when it is due, according to the schedule in the syllabus. Except for real emergencies, late work will result in a reduction of one letter grade per day. If you have a real emergency, email me 24 hours before the assignment is due, and I will work with you to make an exception.

*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.

*Religious Holy Days:* I am glad to accommodate your observance of religious ritual. To do so, I need warning. Please notify me of your pending absence at least two weeks prior to the date of observance of a religious holy day, and I will give you an opportunity to complete the missed work within a reasonable time after the absence.

*Disability Accommodation:* I am glad to provide accommodation to any student with an accommodation letter from the Disabled Students Program (DSP). Information about DSP 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.
- Complete six homework assignments related to the class material, as indicated in the syllabus.

Grades will be based on:

- ✓ Mid-term exam: 15%
- ✓ Final exam: 15%
- ✓ Homework #1 through #6: 10% each
- ✓ Class Attendance and Participation: 10%

Research has shown that both learning and grades are better in course with a larger number of lowerstakes assignments; therefore, no single assignment is worth more than 15% of your final grade. 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.

**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/Watch in Advance	Turn in	Optional Extra Reading
Wed 8/23	IntroductionThe Syllabus			
Fri 8/25	What is population? Size and structure			
Mon 8/28	What is population? Dynamics and change			Ryder, Norman B. "Notes on the Concept of a Population." American Journal of Sociology 69, no. 5 (1964): 447–62.
Wed 8/30	Demographic Transition, Part 1	READ: Lutz et al. 2001. The end of world population growth. Nature 412, 543-545. WATCH: The unrealized Horrors of Population Explosion (NYT Retro Report) <u>http://www.nytimes.com/2015/06/01/u</u> <u>s/the-unrealized-horrors-of-</u> <u>population-explosion.html?_r=0</u>		
Fri 9/1	Demographic Transition, Part 2		Assignment #1: Age Pyramids	
Mon 9/4	Non-instructional Day Labor Day			
Wed 9/6	Population composition	Hout, M., Greeley, A., & Wilde, M. J. (2001). The demographic imperative in religious change in the United States. <i>American Journal of</i> <i>Sociology</i> , 107(2), 468-500.		Parsons, T. 1942. Age and Sex in the Social Structure of the United States. American Sociological Review. 7(5): 604- 616.

Fri 9/8	Composition and selection			
Mon 9/11	How do we gather data on death? How do we measure mortality?	Review the US standard death certificate: <u>https://www.cdc.gov/nchs/data/dvs/std</u> <u>-dcrt.pdf</u>		
Wed 9/13	Overview of death rates across time and populations		Assignment #2: Mortality Selection	Horiuchi, S., and J. Wilmoth. "Deceleration in the Age Pattern of Mortality at Older Ages." Demography 35, no. 4 (1998): 391–412.
Fri 9/15	The epidemiologic transition	Read or Listen: How Western Diets are Making the World Sick. <u>http://www.npr.org/templates/transcri</u> <u>pt/transcript.php?storyId=132745785</u>		Omran, Abdel. (1977) The Epidemiologic Transition: A Theory of the Epidemiology of Population Change. Milbank Memorial Fund Quarterly 49:: 509-37.
Mon 9/18	Infectious deaths	Read/watch: How to Handle the Infectious Disease Threat. <u>http://www.cnn.com/2016/06/03/opini</u> <u>ons/infectious-disease-preparedness-</u> <u>gerstein/index.html</u>		
Wed 9/20	Infectious deaths, part 2			Erkoreka A. (2010) The Spanish influenza pandemic in occidental Europe (1918–1920) and victim age. Influenza and Other Respiratory Viruses 4(2), 81–89.

Fri 9/22	Social inequality and death rates	Lleras-Muney, Adriana. 2005. The Relationship Between Education and Adult Mortality in the United States. The Review of Economic Studies, Volume 72, Issue 1, Pages 189–221,		
Mon 9/25	The Hispanic Paradox		Assignment #3: How is death unequal?	Palloni, Alberto, and Elizabeth Arias. "Paradox Lost: Explaining the Hispanic Adult Mortality Advantage." Demography 41, no. 3 (August 2004): 385–415.
Wed 9/27	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.		
Fri 9/29	Effects of mortality differentials (on the living, on social security)	Garrett, D. M. (1995), The effects of differential mortality rates on the progressivity of social security. Economic Inquiry, 33: 457–475.		Guldin et al. 2015. Incidence of Suicide Among Persons Who Had a Parent Who Died During Their Childhood. A Population- Based Cohort Study. JAMA Psychiatry. 2015;72(12):1227- 1234.
Mon 10/2	Midterm review	Bring questions!		
Wed 10/4	Midterm		Midterm (in class)	
Fri 10/6	How do we gather data on births? How do we measure fertility and fecundity?			

Mon 10/9	The proximate determinants of fertility	Bongaarts, John. "The Fertility- Inhibiting Effects of the Intermediate Fertility Variables." <i>Studies in Family</i> <i>Planning</i> 13 (1982): 179–89.		Davis, Kingsley, and Judith Blake. "Social Structure and Fertility: An Analytic Framework." <i>Economic</i> <i>Development and Culture</i> <i>Change</i> 4, no. 4 (1956): 190– 211.
Wed 10/11	Reproductive technologies, part 1	Review the data presented at: <u>https://www.sartcorsonline.com/rptCS</u> <u>R_PublicMultYear.aspx?reportingYear</u> <u>=2015</u>		Read/Watch: How has IVF developed since the first "test- tube baby"? http://www.bbc.com/news/hea lth-33599353
Fri 10/13	Reproductive technologies, part 2			
Mon 10/16	Fertility Postponement and its consequences	Schmidt et al. 2012 Demographic and Medical Consequences of the postponement of parenthood. Human Reproduction Update Vol 18, at: <u>http://humupd.oxfordjournals.org/cont</u> <u>ent/18/1/29.full.pdf+html</u>		
Wed 10/18	The intergenerational interval, population size, and social change		Assignment #4: Opinions about reproductive technologies	Ryder, N. 1965. Cohort as a concept in the study of social change. American Sociological Review. 30(6):843-861.
Fri 10/20	How do we gather data on sexual and gender identities?	Gender Related Questions Overview, at: <u>http://williamsinstitute.law.ucla.edu/w</u> <u>p-content/uploads/GenIUSS-Gender-</u> <u>related-Question-Overview.pdf</u>		
Mon 10/23	Changes in sexual and gender identity in the US			

Wed 10/25	History of Sex Research- -Kinsey and Laumann			Any chapter from: Kinsey et al. et al. 1953. Sexual Behavior in the Human Female.
Fri 10/27	How do we gather data on sexual practice? How do we measure sex?	Stephens-Davidowitz, Seth Isaac. 2015. "Searching for Sex." New York Times Sunday Review Op-Ed., January 24, 2015. AND Houle et al. (2016) "Let's Talk About Sex, Maybe." Field methods. 28(2): 112–132.		
Mon 10/30	Guest lecture			
Wed 11/1	Guest lecture			
Fri 11/3	Guest lecture			
Mon 11/6	What do we know about sexual behavior in the US and cross-nationally?		Assignment #5: Report on Guest Lectures	Wellings et al. 2006. Sexual and reproductive health 2 - Sexual behaviour in context: a global perspective. Lancet 368(9548): 1706-1728.
Wed 11/8	Contraception, Part 1	Johnson-Hanks, Jennifer. "The Modernity of Traditional Contraception." Population and Development Review 28, no. 2 (2002): 229-49.		Why we still don't have birth control drugs for men, at: https://www.technologyreview .com/s/6o2797/why-we-still- dont-have-birth-control-drugs- for-men/
Fri 11/10	Non-instructional day Veteran's Day			
Mon 11/13	Contraception, Part 2			

Wed 11/15	Fetal loss & abortion	Kulczycki, A. (2011), Abortion in Latin America: Changes in Practice, Growing Conflict, and Recent Policy Developments. Studies in Family Planning, 42: 199-220.		
Fri 11/17	The sex ratio at birth & sex-selective abortion			Greenhalgh, S. 1994. Controlling births and bodies in village China.
Mon 11/20	Marriage squeezes, with special reference to China	Read: "Bare Branches, Redundant Males" from the Economist Magazine. http://www.economist.com/news/asia/ 21648715-distorted-sex-ratios-birth- generation-ago-are-changing- marriage-and-damaging-societies- asias	Assignment #6: Marriage Squeezes	
Wed 11/22	Non-instructional Day Thanksgiving			
Fri 11/24	Non-instructional Day Thanksgiving			
Mon 11/27	Topic TBA (Or catch-up, if we get behind)			
Wed 11/29	Summary lecture			
Fri 12/1	Final review	Bring questions!		
TUES 12/12	FINAL EXAM (7 to 10 PM)		Final Exam	

## Homework Assignment #1: Age-sex Pyramids

## (Due in class on Friday, September 1)

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 300-400 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?

### Homework Assignment #2: Mortality Selection

### (Due in class on Wednesday, September 13)

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.

### Homework Assignment #3: How is death unequal?

### (Due in class on Friday, September 22)

Look through the many tables available at:

#### https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65\_04.pdf

Go to Table B on Page 5. Write 400 words or so about what you find interesting in that table. Describe what you see, and why you find it interesting. What additional information would you find useful in understanding these interesting patterns?

## Homework Assignment #4: Opinions about reproductive technologies

## (Due in class on October 18)

This is an opinion piece. In about 400-500 words, argue for or against the following statement:

"Reproduction is a right. In vitro fertilization and similar reproductive technologies should be accessible to anyone who needs them, and therefore should be paid for by Medicaid and other forms of insurance"

There is no right or wrong answer here—reasonable people may hold a variety of positions on this topic (from no-one should have access to IVF, to it should depend on ability to pay, to everyone should, to many other views). Use evidence and logic to make the best case you can for your opinion.

### Homework assignment #5: Guest lectures

#### (Due in class November 6<sup>th</sup>)

Select the lecture from last week that you found most compelling. Describe what the speaker said that you found most engaging. How do you think differently now as a result of the lecture? (about 500 words)

### Homework Assignment #6: Marriage squeeze

### (Due in class on November 20)

Go back to:

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

(This is the same website you used for assignment #1). 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.