

Hubert H. Humphrey School of Public Affairs  
The University of Minnesota

**PA 5022 Section 7: Population Economics  
Spring 2016 - 1.5 Credits**

Updated April 28, 2016

**Instructor:** Janna E. Johnson  
Office: 231 Humphrey Center  
Email: jannaj@umn.edu  
Office Hours: Tuesdays 12-1:30pm, or by appointment

**Teaching Assistant:** Greg Lewin  
Email: lewin040@umn.edu  
Office hours (& Location): Tuesdays & Thursdays 11:00am-12:00pm (HHH Cube P)

**Lecture:** Tuesday & Thursday 9:45-11:00 AM, HHH 184

**Course Objectives:** This course will introduce students to the main areas within population economics, which applies economic theories and concepts to demographic topics. Such topics include fertility and the family (including the demand for children), population health and mortality, the macroeconomic effects of population change, and the drivers and impacts of internal and international migration. Most topics will be discussed in the context of both the developed and developing world. Students will complete three written assignments and a final course paper, which will involve some basic data gathering and analysis on a demographic topic of their choice.

**Prerequisites:** Completion or wavier of PA5021 or similar microeconomic theory course.

**Readings:** There is no required textbook for this course. Course readings will be available via Moodle. The readings we will use will be at a variety of levels, from mass-market news articles to technical economic theory papers. You are not expected to read or understand all of the more technical readings - pay attention to the reading guidelines for each paper on the syllabus.

**Grading:** Grades will be based on three assignments, a final paper, and class participation, most likely according to the following weighting scheme:

45% Assignments (3)  
40% Final Paper  
15% Class Participation

All questions on the assignments will be given a clearly stated point total. Grades for each assignment will be calculated on a points basis - you will be told the class median point total as well as the minimum and maximum when each assignment is returned. Each assignment will be given equal weight in the final grade, no matter their stated point total. I do not assign letter grades to each assignment, but the final grade for the course will be graded on a “curve”, with

the likely median grade being a B+. I highly encourage asking questions during lecture, as well as answering my questions posed to the class, hence the class participation part of the grade. In addition, I reserve the right to post short “reading response” forums about the lectures and readings on Moodle during the course. Timely and quality participation in these forums will count toward your participation grade.

The assignments will be primarily graded by the TA, in consultation with the instructor. Due to the expected nature of the assignments, answer keys will not be provided.

Incompletes will be only given under extenuating circumstances (documented family crisis, medical emergency, etc.). University and Humphrey policies on incompletes will be followed. There will be no opportunity for extra credit.

**Assignments:** The assignments will likely be of the “short-answer” variety, requiring you to analyze and respond to one or more readings on a particular subject (these readings will be either part of or in addition to the readings for lecture). Depending on the question, there may or may not be a “correct” answer - in many cases I will be looking for critical thinking and analysis of an issue or question, regardless of your conclusions. Assignments will be turned in via upload to Moodle, and are due at the exact time specified. **Late assignments will not be accepted and will receive a score of 0. All parts of all assignments must be typed.** You may discuss the assignments with the instructor, the TA, and other students, but you must hand in your own work. **Students who hand in identical (or nearly identical) assignments will receive a score of 0 for that assignment.**

**Course Paper:** The goal of the class paper is for you to analyze some primary demographic data in order to shed light on one of the theoretical questions covered in this class or in order to investigate a demographic topic that you are personally interested in. The default source for data is the IPUMS set of censuses and surveys. Many but not all topics can be investigated with these sources. If you wish to use another data set or source, you should obtain prior permission from the instructor. You may not take your data from a published source in which it has already been analyzed. You do not need to use any fancy statistical techniques to do your analysis. Simple is fine.

The text of the papers should be no more than **five printed double-spaced pages**, plus references (if any) and any figures and tables (maximum seven) you may want to add. The structure of the paper should include (1) an introduction outlining the question you are trying to answer and why it is interesting, (2) an explanation of which data you are using and how you analyze the data, (3) a presentation of your findings, and, finally, (4) a conclusion explaining what light your findings shed on your original question. The conclusion can also recommend a better way to answer the question. For example, you could discuss another real or hypothetical data source that you didn’t analyze.

The goal of the paper is for you to confront economic theory with real data. You don’t need to do extensive reading on your subject beyond the reading list. What is important is that your paper be clear, original, and that you explain how your analysis addresses the question you are interested in. If you are interested in a topic not directly covered in the course, the instructor and TA will try to help you put together some relevant background reading (if you ask!).

Before doing your data analysis and writing your paper, you will write a paper proposal (due during the fourth week of the class) and will receive feedback from the TA. In order to evaluate

your proposal, you will need a clear definition of your research question and evidence that you will be able to access the data you need. You will not be graded on your proposal, although if you do not complete the proposal on time, you will receive a score of 0 for your class participation grade. The proposal is due at **11:59pm on Friday, April 15**, uploaded to Moodle.

Here is a list of sample topics. You are also highly encouraged to invent one of your own. Each student must investigate a different topic, which will be facilitated through a Moodle forum.

Examples of paper topics are:

- Do the rich have more children?
- Does divorce increase in hard times?
- What are the effects of college education on the chance of getting married, divorced, cohabiting?
- Is assortative pairing (by education, income, etc.) the same for same-sex and opposite sex couples?
- Does the presence of low-skill immigrants increase wages for the college educated?
- What is the relationship between population density and income?
- How does the relationship between socio-economic status and fertility change over the course of the demographic transition?
- Are health inequalities larger for some ethnic or racial groups than for others?
- Do education and occupation influence the proportion of female children in India?
- Which age group was hit hardest by the Great Recession?

*Finding and Analyzing Data:* Your term paper should include original data analysis of data available in the IPUMS project ([www.ipums.org](http://www.ipums.org)). This project, based here at the University of Minnesota's Minnesota Population Center (MPC) makes U.S. census data, international census data, and other data sets available in a common format. Data extracts can be made to download individual records or tabulations can be made online. The analysis of IPUMS data is a valuable skill, that is useful to many students beyond this course. (Although I strongly encourage use of data available on IPUMS, students who wish to analyze other data sets may apply for permission to base their paper on another data set.) Available IPUMS data sets include decennial U.S. censuses from 1850 to 2010, the American Community Survey for the last decade or so, the Current Population Survey (IPUMS-CPS), and international census data from around the world, which can include questions on fertility and mortality.

Before analyzing your data, narrow your research topic to a specific empirical question. A broad topic might be racial segregation and health, whereas a specific empirical question would be "Do African-American children who live in racially homogenous urban neighborhoods have better health outcomes than African-American children who live in integrated urban neighborhoods, even after controlling for family income and health insurance?" This is a great opportunity to apply the methods you learned in PA5032 or PA5044! Again, your analysis is not expected to

be complicated, but *it is expected to be properly interpreted*. The TA and instructor are happy to help with this.

The paper is due by **11:59pm on Friday, May 13**. It will be uploaded to Moodle using the appropriate link. As with the assignments, late papers will not be accepted and will receive a grade of 0. The course paper will be graded by the instructor.

Some students may be tempted to plagiarize papers from various sources, including recycled papers from previous years or courses, papers copied from published articles, papers purchased on the web, and so on. Those students that plagiarize will automatically receive a grade of 0 on the paper and may receive a failing grade in the course as a whole or be subject to other disciplinary action. To avoid these problems, students' paper submissions will be checked through Turnitin via the Moodle site. Turnitin compares the text to a vast database, including previous papers from other courses across the country to check for plagiarism.

### **“Do’s” and “Don’ts” of your final paper**

#### **DO**

- Hands-on analysis of demographic data.
- Be a critical thinker. This means not only being skeptical of whether conventional wisdom on your topic agrees with empirical fact, but also being aware of the limitations of your dataset and your own analysis. For example, if you discover that African-American children who live in racially integrated neighborhoods are healthier than other African-American children, an alternative explanation to the causal effects of neighborhoods is that African-American parents who can afford to live in integrated neighborhoods can also afford better health insurance. You could then try limiting the sample to privately insured children or children whose families have high incomes to see how your results change.
- Label graphs and charts completely. Give a title that answers what/where/when; label axes; provide a legend if necessary; and include a source note at the bottom, telling where the data came from.
- Cite completely all data used (for websites, this means the complete URL, the date, the organization publishing it). Consult a style manual if you are not sure how to cite a source.
- Feel free to discuss your paper topic and whether your data are appropriate with the instructor and TA. They can help you with data sources, analytical methods, and topic development. This should be done in person, NOT over email (to avoid confusion).
- Remember that “data” is plural and “datum” is singular.
- Be consistent with past and present voice when describing your analysis and results.
- Proofread your papers. Have a friend proofread your papers.
- Make sure you give your data the “common sense” test. It is possible to make a computing or data downloading mistake that gives you impossible results. (An example of this is

showing a per capita annual income of \$42. This is nonsense and is the result of a computing mistake somewhere. Also, many students make simple mistakes on population pyramids. Be careful and proofread!)

- Think about the reader when making tables and graphs. Are they easy to read? Is there a better, clearer way to display the same information? Learning to do this well is an important skill that will help you throughout your career.
- Talk to the instructor and TA about your ideas and analysis! We won't write your paper for you, but we're happy to help guide you towards an interesting/feasible topic and help troubleshoot Stata issues.

## DON'T

- Don't use secondary data presented in a published paper. Use original source data. (You can cite data in a published paper as long as it is not your main data source.)
- Don't write a boring and formulaic paper. This is your chance to investigate a topic of interest to you, and it will be much more enjoyable to write (and thus to read) if you are interested in your own results.
- Don't wait until the last minute to look for data or find the right variables to answer your question. You may not be able to find what you need (or your preferred topic may be already taken by another student), and then you will be forced to pick a topic based only on what data you can find. This is a recipe for a boring paper.
- Don't exceed the page limit. You will be penalized for doing so. Longer papers aren't necessarily better papers, and it's always good to practice being concise and clear.

**Attendance and Class Participation:** Attendance is required. This course is impossible to succeed in without attending lecture. Chronic lateness or multiple absences will reduce your class participation component of your grade. If you need to miss a class, please notify me beforehand. If you miss a class, it is your responsibility to find out what you missed.

**Lecture Notes:** I teach my lectures using PDF slides. I will try my best to post the day's slides to Moodle by midnight on the day before class. You are welcome to print out the slides and bring them to class to facilitate note-taking.

Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community. For additional information, please see: <http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html>.

**Instructor and Course Feedback:** I am a new professor, and have enough experience teaching myself and seeing other new professors teach to know that things don't always go very well the first few times around. Therefore, I want to make it clear that I encourage you to

share any feedback you have about the course. You can do so with me directly during office hours or after class, or with the TA. The only things I ask for are honesty and feedback that is constructive. I'm going to do my best to incorporate your feedback as the semester goes on, but please keep in mind there are some things that I can't change (my underlying personality, for example), and that no matter how hard I try, it's impossible to make the class perfect for everyone. That being said, I am passionate about helping all of you learn to the best of my ability, and therefore I very much appreciate any comments and suggestions you may have.

Also, this is the first time I've taught this class (and in fact the first time it has ever been taught at Humphrey or the UofM, as far as I know!) so some things are bound to not go super smoothly, especially initially. All the more reason your feedback is so important and appreciated!!!

**Use of Electronics in Class:** You are allowed to use your laptop or tablet for taking notes in class, but not for any other purpose (facebook, email, etc.). I'd also like everyone to keep their mobile phones put away and silent during class unless you have a good reason (small children, etc.), but if so please tell me.

**Student Conduct Code:** The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.

As a student at the University you are expected adhere to Board of Regents Policy: Student Conduct Code. To review the Student Conduct Code, please see: [http://regents.umn.edu/sites/default/files/policies/Student\\_Conduct\\_Code.pdf](http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf).

Note that the conduct code specifically addresses disruptive classroom conduct, which means "engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities."

**Scholastic Dishonesty:** 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. (Student Conduct Code: [http://regents.umn.edu/sites/default/files/policies/Student\\_Conduct\\_Code.pdf](http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf)) If it is determined that a student has cheated, he or she may be given an "F" or an "N" for the course, and may face additional sanctions from the University.

**Sexual Harrassment:** "Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic

environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy: <http://regents.umn.edu/sites/default/files/policies/SexHarassment.pdf>.

**Equity, Diversity, Equal Opportunity, and Affirmative Action:** The University will provide equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents Policy: [http://regents.umn.edu/sites/default/files/policies/Equity\\_Diversity\\_EO\\_AA.pdf](http://regents.umn.edu/sites/default/files/policies/Equity_Diversity_EO_AA.pdf).

**Mental Health and Stress Management:** As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website: <http://www.mentalhealth.umn.edu>.

Table 1: PRELIMINARY Class Schedule and Topics (subject to and certainly likely to change)

Week	Tuesday	Thursday	Friday
1	<b>March 22</b> Introduction/ The Population Bomb	<b>March 24</b> Population Bomb/Demographic Transition/Measurement	<b>March 26</b>
2	<b>March 29</b> More on Demographic Transition/Measurement <i>Assignment 1 Posted</i>	<b>March 31</b> TA paper consults	<b>April 1</b>
3	<b>April 5</b> The Demand for Children	<b>April 7</b> Demand for Children/Women's Labor Force Participation	<b>April 8</b> <i>Assignment 1 Due</i> <i>Monday, April 11 7pm CDT</i>
4	<b>April 12</b> Women's LFP/ Marriage & Divorce	<b>April 14</b> Contraception/ Intra-HH bargaining <i>Assignment 2 posted</i>	<b>April 15</b> <i>Paper Proposal due</i>
5	<b>April 19</b> Population Aging	<b>April 21</b> Population Health & Mortality	<b>April 22</b>
6	<b>April 26</b> Migration: Why do People Move? <i>Assignment 2 due</i>	<b>April 28</b> Internal Migration in the United States	<b>April 29</b> <i>Assignment 3 posted</i>
7	<b>May 3</b> Immigration: Effects on Receiving Areas	<b>May 5</b> Migrant Remittances	<b>May 6</b> <i>Assignment 3 due</i> <i>Monday, May 9</i>
8	<b>May 10</b>	<b>May 12</b>	<b>May 13</b> <b>Final Paper due</b>

## PRELIMINARY Reading List:

*Please pay attention to this list - often I specify to read only parts of some articles or to “skim” parts, etc. Some articles are optional readings, as specified.*

### 1. **The Population Bomb, Demographic Transition, & Demographic Measurement** - March 22, 24, & 29

David Lam (2011) “How the World Survived the Population Bomb: Lessons From 50 Years of Extraordinary Demographic History,” *Demography* 48(4): 1231-1262.

Ronald D. Lee (2003) “The Demographic Transition: Three Centuries of Fundamental Change,” *Journal of Economic Perspectives* 17(4): 167-190.

Thomas Malthus (1798) *An Essay on the Principle of Population* (1st edition), **Preface, and Chapters 1, 2**. Available at [http://lf-oll.s3.amazonaws.com/titles/311/Malthus\\_0195\\_EBk\\_v6.0.pdf](http://lf-oll.s3.amazonaws.com/titles/311/Malthus_0195_EBk_v6.0.pdf)

Preston, Samuel, Patrick Heuveline, and Michel Guillot. (2000). *Demography: Measuring and modeling population processes*. **Chapter 1** *Note: Don't worry about the calculus in the chapter - I just want you to get familiar with the definition of demographic rates.*

### 2. **The Demand for Children** - April 5 & 7

*Note: These articles contain scary-looking math. Don't spend too much time on trying to understand the math - the intuition is much more important.*

Gary S. Becker. (1960) “An Economic Analysis of Fertility” in *Demographic and Economic Change in Developed Countries*, Conference of the Universities-National Bureau Committee for Economic Research, a Report of the National Bureau of Economic Research, Princeton, N.J.: Princeton University Press: 209-240.

Gary S. Becker. (1991) *A Treatise on the Family*, **Chapter 5**, Cambridge MA: Harvard University Press.

Robert J. Willis. (1973) “A New Approach to the Economic Theory of Fertility Behavior” *Journal of Political Economy*, March-April, 81(2.2): S14-S64.

### 3. **Women's Labor Force Participation and Marriage and Divorce** - April 7 & 12

Claudia Goldin. (1995) “The U-Shaped Female Labor Force Function in Economic Development and Economic History,” in T. Paul Schultz, ed., *Investment in women's human capital and economic development*. Chicago: University of Chicago Press, pp. 61-90.

Claudia Goldin (2006) “The Quiet Revolution That Transformed Women's Employment”, Education, and Family *American Economic Review* 96(2):121. (OPTIONAL - try to skim)

Claudia Goldin (2014) “A Grand Gender Convergence: Its Last Chapter,” *American Economic Review* 104(4): 1091-1119. (OPTIONAL - try to skim)

Hoffman, Saul D. and Susan Averett (2009) *Women and the Economy: Family, Work, and Pay* 3rd edition, Chapter 7, “Women at Work”.

Mammen, Kristin, and Christina Paxson (2000) “Women's Work and Economic Development,” *Journal of Economic Perspectives* 14(4): 141-164.

- Gary S. Becker. (1991) *A Treatise on the Family*, **Chapter 10**, Cambridge MA: Harvard University Press.
- Betsey Stevenson and Justin Wolfers (2007) “Marriage and Divorce: Changes and their Driving Forces,” *Journal of Economic Perspectives* 21(2) 27-52
4. **Contraception & Intra-household Bargaining** - April 14
- Ashraf, Nava, Erica Field, and Jean Lee. (2014) “Household Bargaining and Excess Fertility: An Experimental Study in Zambia.” *American Economic Review*, 104(7): 2210-37.
- Martha Bailey (2006) “More Power to the Pill: The Impact of Contraceptive Freedom on Women’s Life Cycle Labor Supply” *Quarterly Journal of Economics* February 2006, 121(1): 289-320.
5. **Population Aging** - April 19
- Lee, Ronald, Andrew Mason, et al. (2014) “Is Low Fertility Really a Problem? Population aging, dependency, and consumption,” *Science* 346(6206):229-234
- Samuel Preston (1984) “Children and the Elderly: Divergent Paths for America’s Dependents,” *Demography* 21(4):435-457.
- Lee, Ronald, and Andrew Mason. (Eds.). (2011) *Population aging and the generational economy: A global perspective*. **Chapter 1** “Population aging and the generational economy: key findings.” Edward Elgar Publishing.
6. **Population Health & Mortality** - April 21
- Case, Anne, and Angus Deaton (2015) “Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century.” *Proceedings of the National Academy of Sciences*, 112(49), 15078-15083.
- Blog posts in response to Case & Deaton by Andrew Gelman (links on Moodle).
- Meara, Ellen R., Seth Richards and David M. Cutler (2008) “The Gap Gets Bigger: Changes In Mortality And Life Expectancy, By Education, 1981-2000” *Health Affairs* 27(2): 350-360.
- Chetty R, Stepner M, Abraham S, et al. “The Association Between Income and Life Expectancy in the United States, 2001-2014.” *JAMA*. Published online April 10, 2016. doi:10.1001/jama.2016.4226.
7. **Migration: Why do People Move?** - April 26
- Greenwood, Michael J. “Internal migration in developed countries.” *Handbook of Population and Family Economics* 1 (1993): 647-720.
- Sjaastad, Larry A. “The Costs and Returns of Human Migration.” *The Journal of Political Economy* (1962): 80-93.
- Harris, John R., and Michael P. Todaro. “Migration, unemployment and development: a two-sector analysis.” *The American Economic Review* 60, no. 1 (1970): 126-142. (OPTIONAL - has lots of math. I will cover the basics of the model in class.)

8. **Internal Migration in the United States** - April 28

Molloy, Raven, Christopher L. Smith, and Abigail K. Wozniak. "Internal Migration in the United States." *The Journal of Economic Perspectives* 25, no. 3 (2011): 173-196.

Molloy, Raven, Christopher L. Smith, and Abigail K. Wozniak. "Declining migration within the US: the role of the labor market." National Bureau of Economic Research working paper No. w20065. 2014. (OPTIONAL)

Kaplan, Greg, and Sam Schulhofer-Wohl. "Understanding the Long-Run Decline in Interstate Migration." Federal Reserve Bank of Minneapolis Research Department working paper 697. 2015. (Don't worry too much about the math-y model here)

9. **Immigration: Effects on Receiving Areas** - May 3

Edmonston, Barry, and James P. Smith, eds. *The New Americans: Economic, Demographic, and Fiscal Effects of Immigration*. National Academies Press, 1997. Chapter 4, pg. 135-146, 151-153, and Chapter 5, pg. 219-228.

Card, David. "Immigration and Inequality." *American Economic Review* 99, no. 2 (2009): 1-21. (OPTIONAL)

Card, David. "The impact of the Mariel boatlift on the Miami labor market." *Industrial & Labor Relations Review* 43, no. 2 (1990): 245-257. (OPTIONAL)

10. **Migrant Remittances** - May 5

Yang, Dean. "Migrant remittances." *The Journal of Economic Perspectives* 25, no. 3 (2011): 129-151.

Rapoport, Hillel, and Frédéric Docquier. "The economics of migrants' remittances." *Handbook of the economics of giving, altruism and reciprocity* 2 (2006): 1135-1198. (Read section 2.1 only and don't worry about the math in the models - just their predictions)

Ambler, Kate, Diego Aycinena, and Dean Yang. "Channeling Remittances to Education: A Field Experiment among Migrants from El Salvador." *American Economic Journal: Applied Economics* 7, no. 2 (2015): 207-32.