

Fundamentals of Population Science

Demography 5

UC Berkeley, Summer 2018
Syllabus version 1: June 24, 2018

Instructor contact information:

Leslie Root
leslie.root@berkeley.edu
Office location: 2232 Piedmont Ave.
Office hours: TBA

I. Course description:

From deforestation in the Amazon, to the Israeli-Palestinian conflict, to the social security shortfall, many of today's critical problems are related to population size, structure, or composition. Demographers ask: How many people are there? Where are they? What are their attributes? How are these factors changing over time? We answer these questions using a combination of data and models, and the answers are both revealing and consequential.

This course provides a broadly accessible introduction to the social science of demography. The course is organized around topic areas in demography – population size, growth, and composition, as well as fertility, mortality, and migration – and with each topic area, we will examine demographic methods, demographic theory, and at least one related social issue or demographic problem. We will also learn a bit about current issues in demographic research.

Over the course of the semester, we will address three major questions:

1. How do we create knowledge about population? (What are the sources of data? What is the relationship between demographic data and models? How do we evaluate different explanations of data?)
2. How do population size, structure, composition, and change matter—for the economy, for politics, for social structure, for culture? (What things can they affect directly? Indirectly? Through what processes?)
3. What are the relationships between population facts and political and ethical problems of interest? (How are population facts used and misused in political debate? What are the ethical stakes in different population outcomes? To what degree can we separate out the facts at hand from opinions about them?)

At the end of this course, you should be a more critical consumer of the news media's claims about population problems and a more informed voter on issues related to population. And you should be in love with demography, or at least see why somebody could be.

II. Format and practicalities:

This course will require your active participation. Class sessions will vary in format: sometimes I will lecture. Sometimes we will discuss readings. Sometimes we will hold debates. Students learn in different ways, and I therefore try to teach in a range of ways.

What readings are required? The main text for this course is the textbook *Population: An Introduction to Concepts and Issues* by John Weeks, 12th edition. This book is available in hardcover or electronically. For an affordable option, I recommend that you consider renting it from Amazon. You must acquire this book by the end of the first week of class. If you will have trouble doing so, please contact me as soon as possible so that we can find a solution.

We will also be reading popular media coverage of population issues, and occasionally looking at academic papers. These readings will be made available for free through the course site on bCourses.

Readings are required, in the sense that you will need to complete them to do well on the quizzes and to participate actively in class. It can be difficult to complete readings when you have a lot of other things going on, especially if you are not a native speaker of English; we will discuss reading strategies in class to help you with this.

When are readings and assignments due? Readings and homework assignments listed in the syllabus are due at the beginning of class the following day, unless otherwise noted.

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. I check email once a day, and cannot always respond right away. If you have an important issue, come to office hours.

Course schedule: The schedule listed at the end of the syllabus is preliminary; I will update it as needed, and will post any updates to bCourses.

Course materials: All course materials – homework assignments, announcements, and all readings except the textbook – will be available on bCourses. If you need something for this course, or have a question, check bCourses at <https://bcourses.berkeley.edu/courses/1472341>.

Lecture materials: I will strive to post lecture slides to bCourses before each lecture. Lectures will not be recorded, but you are welcome to record them yourself if it is helpful to you.

III. Course policies:

Attendance: Course attendance is a part of your grade. You may miss four hours of lecture (for example, you may miss a full day of class twice, or skip the first hour of class four times) without hurting your grade. After that, points will be deducted from your participation grade.

Timely completion of assignments: Work is due when it is due. Except for very special circumstances, I will not accept late work. If a deadline will not work for you, please let me know as early as you possibly can.

Academic Honesty Policy: Honesty is critical in all academic work. 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. Your obligation is the same: do your own work on assignments and exams and cite your sources. If you are unsure how to cite a source, ask me during class or office hours. Anyone who submits plagiarized work will automatically receive a zero for that assignment. A serious case of plagiarism will result in a grade of F for the class and a referral to campus authorities. More information about academic honesty and campus policies is available at: <http://campuslife.berkeley.edu/conduct/integrity/definition>.

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. If you must miss a class, an exam, or a work assignment in order to observe a religious holy day, I will give you an opportunity to complete the missed work within a reasonable time after the absence.

Documented Disability Statement: I will be happy to provide accommodation to any student with an accommodation letter from the Disabled Students Program (DSP). Any student with a disability who requires academic accommodations should contact DSP for assistance. Information is available at <http://dsp.berkeley.edu>. **Please notify me as quickly as possible if the material being presented in class is not in a format that is accessible to you.**

IV. Course requirements:

Students will be expected to:

- ✓ **Read the assigned material** as indicated in the syllabus, and participate in class.
- ✓ **Demonstrate engagement and ongoing learning in five short, in-class quizzes.** Quizzes help motivate everyone to keep up with the reading, and help to identify where people are having trouble understanding the material. Quiz questions will come from readings and from lecture material.
- ✓ **Demonstrate mastery of the course material in an in-class final exam.** The exam will be a combination of short-answer, multiple choice, and essay questions.
- ✓ **Complete short homework assignments approximately twice a week.** These assignments are aimed at teaching practical skills regarding the representation and interpretation of demographic data.
- ✓ **Use what they have learned** to research and present demographic data to the class on a topic of their choosing.

V. Grades:

Grades will be based on:

- class presentation (10%)
- general participation (15%)
- homework (25%)
- quizzes (25%)
- final exam (25%)

The final course grade will be curved.

VI. Tentative course schedule:

We have two hours of lecture each weekday, Monday through Thursday. The first hour will begin at 10:10 a.m. and conclude at 11 a.m. We will then take a break; the second hour will begin at 11:10 and conclude at noon. Each week will feature a different topic area.

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.

<i>Date</i>	<i>Lecture 1 (10:10 to 11:00)</i>	<i>Lecture 2 (11:10 to 12:00)</i>	<i>Reading and homework</i>
WEEK ONE: INTRODUCTION TO DEMOGRAPHY – POPULATION SIZE AND GROWTH			
7/2	Introduction and overview	The demographic balancing equation; characteristics of populations	Weeks Chapter 2, Section 1 – World Population Growth (pp 26-37) Chapter 3: Demographic Perspectives, pp 59-60, 67-73.
7/3	Demographic growth; Malthus and the history of human population	Problems of population size and growth	Homework #1: basic demographic facts about a country, region, or population of your choice
7/4	No class – Independence Day		
7/5	Demographic projection: the future of population Presentation of homework #1	Presentation of homework #1 Quiz #1	Homework #2: Understanding demographic projection Weeks Chapter 6 – The Fertility Transition (pp 189-250) due 7/12
WEEK TWO: FERTILITY			
7/9	Demographic methods: fertility measurement	Demographic theory: the proximate determinants	Weeks Chapter 3: pp. 81-91, 97.
7/10	The demographic transition: what causes fertility decline?	Low and lowest-low fertility	Homework #3: Interpreting fertility data
7/11	Study in fertility: China's One-Child Policy	Study in fertility: China's One-Child Policy	
7/12	Discussion: the future of fertility	Quiz #2	Weeks Chapter 5 – The Health and Mortality Transition (pp 139-189) due 7/19

WEEK THREE: MORTALITY			
7/16	Demographic methods: the life table	Demographic theory: the health transition	Reading TBA
7/17	Study in mortality: HIV/AIDS in Africa	Study in mortality: HIV/AIDS in Africa	Homework #4: Interpreting mortality data
7/18	Mortality paradoxes: Hispanic and black mortality in the United States	The future of mortality: How long can we live?	
7/19	Why do women live longer than men?	Quiz #3	Homework #5: midterm essay Weeks Chapter 6 – The Migration Transition due 7/26
WEEK FOUR: MIGRATION			
7/23	Demographic methods: how do we collect migration data?	Demographic theory: why do people migrate?	Reading: “Economics and Emigration: Trillion Dollar Bills on the Sidewalk” (read introduction and conclusion) https://www.urban.org/urban-wire/what-immigration-means-our-economic-and-fiscal-future
7/24	The economics of migration	The economics of migration	Homework #6: Interpreting migration data
7/25	Study in migration: Europe’s changing profile	Study in migration: Europe’s changing profile	
7/26	Class presentation workshop #1	Quiz #4	Weeks Chapter 8 - The Age Transition due 8/2

WEEK FIVE: POPULATION COMPOSITION			
7/30	Demographic methods: stable population theory and age structure	Population aging	Reading TBA
7/31	Study in population composition: Japan's aging society	Study in population composition: Japan's aging society	Homework #7: Evaluating pro-natalist and anti-natalist arguments
8/1	Study in population composition: sex selection and marriage squeezes	Class presentation workshop #2	
8/2	What do Berkeley demographers study?	Quiz #5	Homework #8: Final exam review sheet Weeks Chapter 12 – What Lies Ahead?
WEEK SIX: CONCLUSIONS			
8/6	Concluding remarks	Class presentation workshop #3	
8/7	Final presentations, part 1	Exam review, part 1	
8/8	Final presentations, part 2	Exam review, part 2	
8/9	<i>Final exam</i>		