Economic Demography (Econ/Demog C175)

Spring 2019

Syllabus

(version: Dec 27, 2018)

Prof. Joshua Goldstein  (josh.goldstein@berkeley.edu)
Dept. of Demography (2232 Piedmont Ave., room 204)

Faculty Assistant: Dr. Ellen Langer (erlanger@demog.berkeley.edu)
Office hours: Tuesday 2:30-3:30 (and by appointment by contacting Dr. Langer)

Head GSI: Carla Johnston (carlajohnston@berkeley.edu)

Both Demog C175 and Econ C175 count toward Economics Major and Demography Minor.
Both also meet International Studies, L&S Breadth requirement, and Social & Behavioral Sciences, L&S Breadth requirement

1. Course Description

In this course, we will study the economic causes and consequences of population change. Using examples from history and the present, from the United States and around the world, this course aims to provide students with an understanding of a wide range of population issues. These include: Are more people good or bad for economic growth and well-being? How does population growth affect the environment? What effect do we expect immigrants to have on the economy? How could slower population growth increase economic inequality? How do technological progress and population influence each other? What economic theories can help us understand why people get married and divorced or how many children people have? Why do people migrate? What are the main drivers of mortality improvement? These and other questions will be addressed using economic theory and real-world data.

There is a computing component to the course. Weekly assignments will give students a chance to work with data, as well as computer simulations, using the R computing language.

2. Prerequisites

Economics: We recommend that students have already taken Microeconomic Theory (Econ 100A or Econ 101A) or Macroeconomic Theory (Econ 100B or Econ101B). If you have not taken either of these courses, you may still enroll in the class but will likely find yourself at a disadvantage relative to your classmates. For those who have not had either of these courses and would like to assess if they have the necessary background, please ask yourself if you are familiar with at least two (2) of the following models and concepts this course will build on: (i)
increasing and decreasing marginal returns to scale, (ii) Cobb-Douglas production functions, (iii) the Solow growth model, (iv) comparative advantage and the gains to trade, and (v) income and substitution effects.

Mathematics: You should also be comfortable with simple mathematical models of exponential growth, matrix multiplication, and the idea of maximization of a function.

Computing: No computing background is required. However, students with less experience should expect to have to spend more time on the labs (which use the “R” computing language), particularly in the first weeks of the semester.

3. Requirements

The requirements for Econ/Demog C175 are

i) Class attendance

Class attendance is important. Student participation is highly encouraged, and we aim to have an active classroom. We aim to have an active classroom, opportunities for questions and discussion, and a mix of formal lecture and in-class activities.

ii) Weekly "lab" assignments

The weekly homework will typically include short answers on economic theory and a lengthy computing section using “R” with data and/or simulation models. We expect the assignments will take 3 to 6 hours per week, depending on the student. They must be submitted to Gradescope (see below).

iii) Midterm exam

We will have an 80 minute in-class midterm exam.

iv) Final exam during exam period.

4. Grading

Grades for this class will be made on a curve, with the following weights:

- Labs 30% (we drop your two lowest two scores)
- In-class midterm examination 25%
- Final examination 45%
- Piazza discussion board: an additional 2% possible as extra-credit

5. Resources
A. Lecture. (mandatory) We meet twice a week for 80 minutes, from 12:40 to 2:00. Lecture slides and other materials will always be available after class (and sometimes before). Students should take pen and paper notes in lecture.

B. Office hours. (optional) Graduate Student Instructors will hold weekly office hours at either the Demography Department at 2232 Piedmont Avenue (in the tea room or seminar room) or at their office in Evans Hall. Exact times and locations are given on bCourses. Professor Goldstein is available after class for short-questions and by appointment. To set up an appointment please email, Prof. Goldstein’s faculty assistant, Dr. Ellen Langer (erlanger@berkeley.edu).

C. Discussion sections (optional) GSIs will offer sessions on special topics with technical detail in economics and/or demography. There are typically about 6 such topics per semester. You do not need to sign up or enroll in discussion sessions and can attend as many or few as you like. The discussion section times will be announced in advance, and multiple sessions will be offered of the same section.

D. Readings. (mandatory) Each week we will have readings. The reading list and electronic links to the readings are available on bCourses.

E. PIAZZA. (mandatory) This on-line discussion tool is an important resource for all students. Questions on course logistics; the intellectual content of lectures, readings, or assignments; and especially computing are very welcome. In order to encourage active participation, students’ participation in answering Piazza questions will be included in the final grade. We expect most answers on Piazza to be from other students. GSIs will check the Piazza board most days in order to provide additional help. The graduate students in this course have kindly agreed to help answer computing questions.

F. Computing (mandatory): The labs will use network computing, using our R-studio server that can be accessed using your internet browser (such as Chrome). You do not need any special hardware or software.

6. Logistics

A. Enrollment. If you cannot yet access the bCourses site, please check the computing website, which also has the reading list, at http://courses.demog.berkeley.edu/goldstein175/ until your enrollment becomes finalized. If you are having trouble accessing any of the electronic resources for this class, contact Dr. Ellen Langer (erlanger@demog.berkeley.edu), Professor Goldstein's faculty assistant for this course.

B. Expectations in class. The use of cell phones is forbidden. Because both the temptation to use laptops for entertainment and the distracting effect this behavior has on other students are substantial in large lecture courses, we encourage all students take their notes the old-fashioned way, on paper. Sometimes lectures will be available in advance, and it may be useful to print out the slides and write directly on the print-outs. If you must use a laptop to take notes, please sit in the front three rows of the class, with your internet dis-connected.
D. Labs.

Collaboration on the labs is allowed as long as (i) your lab is written up independently and (ii) you include the names of your collaborators in your problem set. Labs must be turned in by the deadline, which unless otherwise announced is Monday at 10 pm. (If you turn in the lab late, you risk it not being graded and receiving zero credit.)

In order to accommodate students who miss a deadline (or two) or have a technical problem submitting a homework, we will drop the lowest two lab grades that every student receives.

Turning in your labs. Please see
http://courses-demog.berkeley.edu/goldstein175/Instructions/t turning_in_your_labs175.pdf

E. Honor and integrity.

Berkeley's honor code will be expected of all students.