Syllabus (v. 1.0) Economic Demography (Econ/Demog C175) Spring 2017

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Office hours: Tuesday 2:30-3:30 (and by appointment by contacting Dr. Langer)

As <u>either</u> Demog C175 or Econ C175: Course counts toward Econ Major and Demography Minor Meets International Studies, L&S Breadth requirement.

Meets Social & Behavioral Sciences, L&S Breadth requirement

1. Course Description

In this course we will study the economic and social 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?

This year, we are introducing a computing component to the course. Weekly assignments will give students a chance to work with real data, as well as computer simulations, using the R computing language.

2. Prerequisites

Students should have successfully completed at least one economics course (micro or macro) prior to taking this course. You should also be comfortable with simple mathematical models of exponential growth, matrix multiplication, and the idea of maximization of a function.

No computing background is required. However, students with less experience should expect to have to spend more time on the labs, particularly in the first weeks of the semester.

3. Requirements

The requirements for Econ/Demog C175 are

i) Class attendance

Class attendance is important. Material will be presented that is not in the readings. Student participation is highly encouraged. We try to present as many opportunities as possible for you to participate, including the use of the iClicker.

ii) Weekly "lab" assignments

The course will have lab assignments almost every week. These assignments will typically computing section using R with data and/or simulation models as well as a short answer component. We expect the assignments will take 3 to 6 hours per week, depending on the student.

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:
Participation (iClicker with lowest 25% dropped and responding to "Piazza" questions) 5%
Labs (Two lowest scores will be dropped) 30%
In-class midterm examination 25%
Final examination 40%

5. Resources

A. Lecture. We will meet twice a week for 80 minutes, from 12:40 to 2:00. We aim to have an active classroom, with in-class iClicker quizzes, opportunities for questions and discussion, and a mix of formal lecture and in-class demonstrations. Lecture slides and other materials will be made available (sometimes these slides will be made available before class). Students should take pen and paper notes in lecture.

B. Lab office hours. Graduate Student Instructors will hold weekly office hours in the Demography Department at 2232 Piedmont Avenue (in the tea room or seminar room). The regular schedule (which will apply unless otherwise announced) will be

M 3-4, Gabriel Borges;

Tu 3-5. Yi Zhou:

W 10:30-11:30, Leslie Root;

W 1:30-3, Mia Zhong;

In addition, Boroka Bo and Carl Mason will hold special computing sessions at times to be announced.

- **C. Discussion sections (optional)** GSIs will also offer several sessions on special topics, including: (i) Malthus and Solow models (ii) Pay-As-You-Go pensions systems (iii) Micro-economic modeling of fertility and (iv) Economics of migration. 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**. Each week we will have readings. The reading list is available on bCourses and (at least for the first few weeks) also at http://courses.demog.berkeley.edu/goldstein175/. Most readings are available on-line (from campus or via proxy). Several readings will be added either in the form of an eReader or as PDFs on our bCourses website.
- **E. PIAZZA.** 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.

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 either 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. 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 row of the class, and please turn-off the internet function. Some days we will use a laptop in class. This will be announced in advance.
- **C. iClickers.** Once we get the iClicker system up and running (typically in week 2), all students are expected to bring their iClicker with them to class. We will use iClickers to learn, not evaluate, so you don't need to worry about getting your answers wrong.

It is forbidden to use an iClicker belonging to someone else. If you have to miss class, then you miss class, and having someone else click your iClicker only risks getting you and your friend into trouble.

To minimize stress around the iClickers, we allow 25% non-response. So if you miss an occasional class or fail to click or even forget your iClicker, this should not affect your grade.

D. Labs. Collaboration on the labs is allowed as long as (i) your problem set 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 be graded and receiving zero credit.)

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

E. Honor and integrity. Berkeley's honor code will be expected of all students.