This course will examine various economic and social causes and consequences of population change in an international context. The consequences studied will include the economic impact of immigrants on US workers and taxpayers, the growing pension burden as populations age, the effect of population growth on economic growth, and environmental consequences of population growth. The course will also examine the economic causes of demographic behavior including fertility, marriage, and labor supply. How have the functions of the family changed during the course of economic development, and how do they continue to change today? Why have divorce and extramarital fertility risen so much, while fertility has fallen way below replacement in many countries and marriages are postponed to later ages or foregone altogether? How are these profound changes in family life related to the changing economic roles of women and to economic growth? Finally, the course will consider whether there is a gap between individual and societal net benefits to childbearing which would provide grounds for government intervention to alter birth rates.

You can enroll for this class either as Economics C175 or as Demography C175; these are one and the same class, and both count towards an Economics major or a Demography minor in exactly the same way. The class meets in F295 Haas on Tuesdays and Thursdays from 2:10 to 3:30. The instructor is Ronald Lee. His office hours are Tuesday 3:45-4 (drop in) and 4-5 (sign-up at http://www.wejoinin.com/sheets/lucip) and Thursday 3:45-5 (except first Thursdays of the month, i.e. Feb. 7, Mar. 7, Apr. 4, and May 2) in Room 202, 2232 Piedmont Ave. You can also catch him immediately after class on Tuesdays and Thursdays for short discussions in the hall or on the walk back to his office. He can be reached at 642-4535 or by e-mail at rlee@demog.berkeley.edu. Class attendance is very important; there is material presented in lecture that is not included in the readings.

There will be a midterm examination (scheduled for Tuesday, March 12th, on the 15th class meeting) and a final examination, based on the readings and the lectures, on Monday, May 13th, from 11:30–1:10 pm at the start time listed in the official exam schedule, but shorter than listed. In addition, there will be a term paper due on Friday, April 5th at noon, described below. There will be an opportunity to revise your paper in response to grader’s comments. Short problem sets (five) will also be assigned and discussed throughout the term. Problem sets will be discussed in the optional sections (see below). I will hold special optional review sessions before the Midterm and Final exams. Grades will be based 28% on the midterm, 25% on the research project, 30% on the final, 12% on problem sets, and 5% on iClicker responses to questions in class. This grading scheme may be altered.

Accommodation of religious creed. Please carefully read the class schedule. If you need to request an alternative time for an exam to accommodate your religious creed, please submit a request directly to Professor Lee by the end of the second week of the semester. Likewise, notify the instructor in writing (email is fine) by the end of the second week of the semester of any potential extracurricular conflict (athletics or other competition, performance, or interviews) and recommend a solution.

There will be optional one-hour discussion sections held each week for this class, led by GSIs Aaron Chalfin (Head GSI), Sara Lopus, Julia Goodman, and David Silver. The sections will discuss answers to problem sets, give hands-on lessons on some optional computer topics such as demographic data on the internet or how to construct a population pyramid, and hold student discussions of the material from class and readings. There will be four sections offered each week, from which you
can choose any offered time. You can go each week to whichever section you prefer or to none at all. In the weeks before the final and midterm exams, there will be additional section times offered, from which you can again choose. You do not need to sign up for the section, and you do not need to go to the same section each week. The schedule for sections will be announced in class and posted to bSpace (see below). Class enrollment and grading are completely independent of these sections.

**Teaching Assistants:** Aaron Chalfin (Head GSI), Sara Lopus, Julia Goodman, and David Silver. Office hours and section times to be posted on bSpace. The two best ways to communicate electronically with GSIs are to send e-mail to Aaron Chalfin at achalfin@berkeley.edu and the Piazza forum.

**Web Site:** There is a course website in bSpace. If you are officially enrolled in the course, then you can get access as described below. If you are not enrolled but are on the waiting list and are attending class, contact Ellen Langer or Traci Lindsey at 175admin@demog.berkeley.edu to get guest access to the website.

**Using bSpace:** You will enter bSpace through what is essentially your own “personal space.” You should not have to do anything to create that space initially, just have your CalNet ID and passphrase handy and proceed as follows:
1) Go to http://bspace.berkeley.edu/portal/login or simply click on bSpace on the UC Berkeley home page.
2) Choose the option “Login through CalNet.”
3) Enter your own CalNet ID and passphrase, and press Enter. You will see a series of tabs representing courses for which you are enrolled. Only those courses which have bSpace sites will appear.
4) Click on the tab labeled Demog C175 or Econ C175 to enter the site for this class.

If you encounter any problems, please contact Ellen Langer or Traci Lindsey at 175admin@demog.berkeley.edu. Once you have entered the course website for C175, a home page will appear, with areas devoted to the general course description and to recent announcements, discussion, and chat room items. Please check the website from time to time for important announcements such as schedule changes, new features, etc. On the left side of the screen, you will find a sidebar menu which gives access to this Syllabus and other features, including a Schedule (which will include assignment due dates, midterm and final exam dates and times, office hours, etc.), the Chat room, Assignments, and Resources (which will include a glossary of relevant terms, old exams, etc.). Please check under Announcements if you are not sure where to find a newly posted item. Office hours will also be displayed on the Home Page.

**Readings:** All readings are required. Most readings are available online and may be accessed through the links included below. Most links can be clicked to open, but a few may need to be copied and pasted. You can access these readings on campus. From off campus you will need to set up a library proxy server as explained at http://www.lib.berkeley.edu/Help/connecting_off_campus.html. Some other readings are not available on-line and are instead in a small course reader for sale at Copy Central (2560 Bancroft). It can be bought either as a digital reader or as a printed reader.

**iClicker:** This class requires that you purchase an iClicker and bring it to each class meeting. The iClicker will permit you to respond wirelessly to questions asked in class. Your answers will automatically be recorded and combined with those of other students in charts displayed on the screen. Some of the questions will be substantive questions about class material. Some of them will be survey questions about your own demographic background. Some may ask basic questions about assigned readings. Your participation by responding to iClicker questions counts for 5% of the class grade; participation counts whether your answer is right or wrong. The purpose of the iClicker is to enrich the lecture, to let all students participate despite this being a large lecture class, and to get you, the student, more actively involved in the class. iClickers can be purchased at the ASUC store ($40.00 new, $30 used; available also as rentals, $30 new rental, $15 used rental) or elsewhere (they are available new from Amazon.com for $35 or less). Once you have bought your iClicker, register it online at http://www.iclicker.com/registration. This will link your clicker to your name and class records and ensure that your responses are recorded. STUDENTS MAY NOT RESPOND ON MORE THAN ONE CLICKER IN THE SAME LECTURE. IF THIS OCCURS ALL STUDENTS INVOLVED WILL BE PENALIZED. We tally iClicker data on a weekly basis and expect to post it on the bSpace site regularly. An announcement will be posted once the iClicker data from the previous week has been uploaded. If you have trouble registering your iClicker, please send an e-mail within the first week of class to iclicker@demog.berkeley.edu. If the serial number is rubbed off or you have other iClicker problems, go to support at the iClicker website (the serial number is also printed in the battery compartment of your clicker).

**Piazza:** Go to piazza.com/berkeley/spring2013/econdemogc175 and register. We will use it in place of the bSpace forum.

**Computer Lab:** In some weeks, the optional sections will be held in the SSCL (Social Science Computing Laboratory) in Room 64, Barrows Hall. In addition, students can use this lab on weekdays from 10 a.m. to 5 p.m., when there is no regularly scheduled class in the lab (the room schedule is posted on the door of the lab and will be posted on the course website in a
based on an original analysis of primary data. Do not take your data from

Unlike most other papers you may have written, this paper is not a literature review or critique. This is to be a brief paper
tabulations, charts, correlations, and other data analysis techniques are useful. The topic of the paper must involve
demography, but it does not need

Those with statisti

Academic Honesty: It is your responsibility to check the student guide to academic honesty at

Term Project Assignment for Economics C175/Demography C175: The term project gives you the opportunity to get
hands-on experience doing research using demographic data to answer a question of your choosing. In the past, students have
found it challenging, but very interesting and rewarding. Many find it their favorite part of the course. Those with statistical
skills can use them in the project, but these skills are not necessary. While regression models are not necessary, cross-
tabulations, charts, correlations, and other data analysis techniques are useful. The topic of the paper must involve
demography, but it does not need to be closely related to any theory presented in class.

Unlike most other papers you may have written, this paper is not a literature review or critique. This is to be a brief paper
based on an original analysis of primary data. Do not take your data from a published paper or report which has already
analyzed it. You should draw your own conclusions from your own analysis of the data. If you are not clear on what I mean by this, please ask me in class.

**Choosing a Topic:** There is a wide range of possible topics for your paper. If you are unsure that your topic is appropriate, you should ask a GSI or the professor for approval. Papers could focus on fertility, mortality, migration, education, occupation, marriage, divorce, labor force participation, earnings, wealth holdings, country of birth, or special sub-populations such as those of prisons, universities, or military bases; and so on. Be imaginative! The best papers are not formulaic; rather they are motivated by a question of interest to both the author and the reader. Here are titles of three of the best papers done last year: “Racial Diversity and Hate Crime in The United States 2009,” “Modeling Cohabitation and Teenage Pregnancy Trends: Linear Regression Analysis Based on National Data,” and “Patterns of Small for Gestational Age Births in the United States.”

**Finding and Analyzing Data:** Once you have a broad research question in mind, it may be useful to examine datasets before narrowing your topic question. The population sampled and questions asked place many limitations on the kinds of narrow empirical questions you can answer. On the course website there are links to original datasets (under “Paper Resources”). There will also be special optional sections offered for those of you who would like to learn about data sets available on the Web.

At the Social Science Computer Lab (SSCL), you will be able to access the 2000 US Census in detail, down to the geographic level of groups of blocks. This is better than simply using the Census Web Site. Also, you can access the 1990 Census. In addition, you can access the Great American History Machine, which has data from all US censuses back to the first in 1790, at the geographic level of counties. This data set is best for looking at maps showing how the geographic distribution of variables you choose change from decade to decade over the past 200 years. Another useful data set is IPUMS, which has individual level data from US censuses going back to 1850 and similar data for many other industrial and Third World nations. Using the IPUMS requires a higher level of computer and analytic expertise (beyond spreadsheets), but some students might want to ask a GSI about it. There are also special data sets on time use, health, crime, and many other topics.

Before analyzing your data, it will be necessary to narrow your research topic to a specific empirical question (e.g. 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 neighborhoods of Chicago have better health outcomes than African-American children who live in integrated neighborhoods of Chicago, even after controlling for family income and health insurance?”). One or two problem sets early in the term will acquaint you with the data sources before you start your paper, as well as with some useful demographic methods.

**Final Paper Format:** Your paper should include an introduction in which you state the thesis clearly and motivate the topic (answer the "why should we care" question). You should also briefly describe what dataset you used, but the bulk of your paper should focus on your analysis of the data and explanation/interpretation of the results you obtained. The conclusion should summarize concisely what you learned about your topic and what further analysis would be needed to answer more definitively the question of interest. 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 first draft of the paper is due on Friday, April 5th, 2013, by 12 noon in the Demography Building at 2232 Piedmont Ave., or can be turned in earlier in class. This early due date will prevent the paper from interfering with other activities in the last weeks of term.

Grading the Paper: You will receive a grade on this first draft, which will count for half of the overall grade on the paper. If the first version is not submitted on time, your grade on the paper will automatically be reduced by one step for each day (or part thereof) that it is late, e.g., from B+ to B– if it is one day and two hours late. You will also get a separate grade on the revised version, which will ordinarily be no lower than the grade on the first draft and should be higher if you have improved it by revising. This grade on the revised version counts for the other half of the overall grade on the paper. Thus if you get a B– on the first draft and a B+ on the second draft, your overall grade for the paper would be a B, the average of B– and B+.

You may choose not to revise your paper, in which case the grade received on your first draft will be your overall grade. (Note: The precise grading scheme used may differ somewhat from that just described.)

**Revision of papers:** Once the papers are returned to you, you will have one week to revise the papers in response to the comments of the graders. Graders will provide constructive feedback on how your paper could be strengthened. If you choose to revise your paper, the revision will be due Friday, May 3, by 5 p.m.

Submit the paper on the web and in hard copy: Unfortunately, a few students have submitted plagiarized papers in past years, including recycled term papers from previous years, papers copied from published articles, papers purchased on the web, and so on. In this case, students automatically receive a failing grade on the paper and may receive a failing grade in the course as a whole or be subject to other disciplinary action through the campus Office of Judicial Affairs. To avoid these
problems, students are required to submit their papers on a special web site as well as in hard copy. The web site then compares the text to a vast data base, including previous term papers from this and other courses across the country to check for plagiarism.

Some examples of good term papers from previous classes will be posted on bSpace for your use. You can use them for general guidance and inspiration.

“Do”s and “Don’t”s for your term projects—Suggestions from a former Head GSI:

**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, the obvious counter-explanation 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 GSIs or graders. They can help you with data sources, analytical methods, and topic development. This can be done by e-mail or in person.
- 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!)
- Investigate interesting data sources such as IPUMS, state and local government agencies, companies, international sources, research organizations, etc.
- 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.

**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. You may not be able to find what you need, 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.
## Demography/Economics 175
### Spring 2013

(Note: This schedule is subject to change. Please see course website for updates)

<table>
<thead>
<tr>
<th>Week</th>
<th>Tuesday</th>
<th>Thursday</th>
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<tbody>
<tr>
<td>1</td>
<td>22 Jan</td>
<td>24 Jan</td>
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<tr>
<td></td>
<td>No sections this week.</td>
<td>No sections this week. Hand out PS1.</td>
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<td>2</td>
<td>29 Jan</td>
<td>31 Jan</td>
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<td></td>
<td>Computer sections this week (see separate schedule for places &amp; times)</td>
<td>Computer sections this week (see separate schedule for places &amp; times)</td>
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<td>3</td>
<td>05 Feb</td>
<td>07 Feb</td>
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<td>PS1 DUE by 2:20 pm; Hand out PS2.</td>
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<td>4</td>
<td>12 Feb</td>
<td>14 Feb</td>
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<td></td>
<td>Computer sections this week (see separate schedule for places &amp; times)</td>
<td>Computer sections this week (see separate schedule for places &amp; times) Return PS1.</td>
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<td>5</td>
<td>19 Feb</td>
<td>21 Feb</td>
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<td>PS2 DUE by 2:20 pm; Hand out PS3.</td>
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<td>6</td>
<td>26 Feb</td>
<td>28 Feb</td>
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<tr>
<td>7</td>
<td>05 Mar</td>
<td>07 Mar</td>
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<tr>
<td></td>
<td>PS3 DUE by 2:00 pm; Return PS2.</td>
<td>Answer key for P3 posted to bSpace.</td>
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<tr>
<td>8</td>
<td>12 Mar</td>
<td>14 Mar</td>
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<tr>
<td></td>
<td>No sections today. MIDTERM 2–3:30pm</td>
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<tr>
<td></td>
<td>NOTE: Midterm Review with Prof. Lee</td>
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<td></td>
<td>Monday, March 11, 5:30–7 (Location TBA)</td>
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<td></td>
<td>Hand out PS4.</td>
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<td>9</td>
<td>19 Mar</td>
<td>21 Mar</td>
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<td></td>
<td>Return PS 3.</td>
<td>PS4 DUE by 2:20 pm</td>
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<td></td>
<td></td>
<td>No afternoon sectionsbb.</td>
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<tr>
<td>10</td>
<td>SPRING RECESS</td>
<td>SPRING RECESS</td>
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<tr>
<td>11</td>
<td>02 Apr</td>
<td>04 Apr</td>
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<tr>
<td></td>
<td></td>
<td>Return Midterm; see website for section and office hour schedule</td>
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<tr>
<td></td>
<td></td>
<td>PAPER DUE Friday, April 5th, by 12 noon in 2232 Piedmont Ave.</td>
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<td>12</td>
<td>09 Apr</td>
<td>11 Apr</td>
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<td>See website for additional office hours for paper help.</td>
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<tr>
<td>13</td>
<td>16 Apr</td>
<td>18 Apr</td>
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<td>Hand out PS5; return PS 4.</td>
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<tr>
<td>14</td>
<td>23 Apr</td>
<td>25 Apr</td>
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<td></td>
<td>Return papers</td>
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<td></td>
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<td>PS5 DUE by 2:20 pm</td>
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<td>15</td>
<td>30 Apr</td>
<td>02 May</td>
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<td></td>
<td></td>
<td>Presentation of Selected Student Papers.</td>
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<td></td>
<td>Revised Term PAPER DUE FRIDAY MAY 3 by 5 p.m.</td>
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<tr>
<td>16</td>
<td>07 May</td>
<td>09 May</td>
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<tr>
<td></td>
<td>Optional! Reading/Review/Recitation Location TBA</td>
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<tr>
<td></td>
<td>Presentation of Selected Student Papers and Review.</td>
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<tr>
<td></td>
<td>PS5 available for pickup in 2232 Piedmont.</td>
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<tr>
<td>FINAL</td>
<td>NOTE: Final Exam Review with Prof. Lee, Sunday, May 12, 4-6 p.m. (Location TBA)</td>
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<tr>
<td></td>
<td>MONDAY, MAY 13, 2013 11:30am–1:10pm</td>
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Goals of this Course
As part of Berkeley's Undergraduate Student Learning Initiative (USLI), the Economics Department has developed learning goals for the Economics major. (See http://emlab.berkeley.edu/econ/ugrad/ugrad_goals.shtml).

The specific learning goals for this course include:
CT1. Apply economic analysis to evaluate everyday problems.
QT1. Understand how to use empirical evidence to evaluate an economic argument.
QT2. Interpret statistical results.
QT4. Obtain and/or collect relevant data using specific qualitative and/or quantitative research methods.
CS1. Communicate effectively in written, spoken, and graphical form about specific economic issues.
CS2. Formulate a well-organized written argument supported by evidence.
LL2. Know how to locate and use primary data sources (e.g., BLS Household Survey, UN Human Development Index)
OFFICE HOURS in 2232 Piedmont Ave., Room 202
Tues: 3:45-4 (drop in), 4-5 (sign-up at http://www.wejoinin.com/sheets/lucip)
Thurs: 3:45-5
Except Feb. 6, Mar. 6, Apr. 4, and May 2

Economics/Demography C175: Economic Demography

READING LIST

All readings are required. Most readings are available online and may be accessed through the links included below. Most links can be clicked to open, but a few may need to be copied and pasted. Some other readings are not available on-line and are instead in a small course reader for sale at Copy Central (2560 Bancroft). It can be bought either as a digital reader or as a printed reader. An iClicker is also required for the course.

I. Introduction: The World Demographic Situation and Its Consequences

A. Population in the news media


B. Trends in the World Population


II. Changing Economic Roles and the Family


A. Theories of Changing Family Life


B. The Changing Economic Roles of Women in the US and the World

Robert S. Pindyk and Daniel L. Rubinfeld (2009) Microeconomics (7th edition) pp. 67–88 and 120–122. (These selections present basic consumer theory, including indifference curves, budget constraints, consumer choice, and income and substitution effects. It will be review for those who have taken intermediate microeconomy. We will be drawing on this material in several later sections as well.) [Reader]


C. The Changing Family and the Economics of Marriage


D. The Economics of Fertility: Quantity–Quality and Value of Time


http://www.nature.com/nature/journal/v460/n7416/abs/nature08230.html (choose pdf or full text on site)

III. Immigration and Its Consequences for the United States

A. The Demography of Immigration and the Growth of Minority Populations in the U.S.


B. Immigrants in the Labor Force


C. The Economic Consequences of Immigration

Several of the readings on immigration are in the following book, which will be referred to as NRC: National Research Council (1997) The New Americans: Economic, Demographic and Fiscal Effects of Immigration (National Academy Press). James Smith and Barry Edmonston, eds.


D. The Fiscal Impact of Immigration


E. Immigration Policy


IV. Consequences of Population Growth: The Grand Theories — Optimum, Equilibrium, and Technological Progress

A. Optimum Population, Wage and Rents

Review Pindyck and Rubinfeld (2009) pp.198-203, “Production with one variable input (labor)”. Previously read for immigration section. [Reader]


B. Malthusian Theory: Population Equilibrium and Welfare

Thomas Malthus (1798) An Essay on the Principle of Population (first edition), Chapters 1–2. [download pdf on site]


C. Population Pressure, Labor Absorption in Agriculture, and Technological Change


V. Population and the Environment


VI. Population, Savings, and Economic Growth


VI. Population Age Distributions and Their Consequences

A. The Demography of Aging


B. Retirement: Trends and Causes


C. The Theory of Unfunded Pensions – No Readings, Lecture Only (You can start reading for the next section)


VIII. The Theoretical Basis for Policy

