# Course Calendar with Readings Economic Demography Econ/Demog c175 Spring 2017

Prof. Joshua R. Goldstein January 25, 2017, version 1.1

#### Notes:

- This document is subject to change. Please check bCourses for the latest version.
- All readings with links are accessible from within campus network or using proxy.
- Lab numbers are by week (Don't worry that you don't see a lab numbered 5 or 7, since there are no labs these weeks.)
- Labs are due on the Monday after they are assigned by 10 p.m. (unless otherwise announced).
- eReader and TBA items are not yet available.

# Week 1: Introduction

Lab: lab\_1\_world.Rmd

Lecture A: Course Introduction

Lecture B: History of World Population Growth

• Massimo Livi-Bacci (2012) "The Space and Strategy of Demographic Growth," in A Concise History of World Population (5th Edition), Chapter 1:2-21 http://media.wiley.com/product\_data/excerpt/86/EHEP0027/EHEP002786-34.pdf Big picture on humans, animals, environment, and population growth. Read only pages 2-7 and 17-27.

# Week 2: The Impossibility of Progress, According to Malthus

Lab: lab\_2\_malthus.Rmd

# Lecture A. Population Feedbacks and the Malthusian Model Lecture B. Dismal Implications

- Thomas Malthus (1798) An Essay on the Principle of Population (1st edition) ("Preface" pages vii-viii; "Chapter 1," pp 1-5, and "Chapter 2," pages 6-11. http://www.esp.org/books/malthus/population/malthus.pdf If possible, do Malthus reading before class. What does he mean by 'vice'? What does he mean by 'oscillations'? How can a population improve its standard of living?
- Ronald Lee (1980) "An Historical Perspective on Economic Aspects of the Population Explosion: the Case of Pre-industrial England," in Richard Easterlin, ed., Population and Economic Change in Developing Countries (University of Chicago Press). http://www.nber.org/chapters/c9671.pdf A modern presentation of Malthusian dynamics, with diagrams. Read only pages 517-520 and 541-546.

# Week 3: Capital to the Rescue?

Lab: lab\_3\_solow.Rmd

# Lecture A. Solow's Growth Model, Production Functions, and Equilibrium

• Rudiger Dornbusch and Stanley Fisher (1987) Macroeconomics, 4th Ed., "Growth Theory", pages 726-737. A textbook presentation of Solow model, using population growth rates as part of the motivation. The notation is similar to what we will use in class, except they denote "output per head" as x, but we will use y. If you have taken macro, please feel free to use your own textbook instead. [available on bCourses]

# Lecture B. Does slower growth create more inequality? A Solow application

• Thomas Piketty and Emmanuel Saez (2014) "Inequality in the long run," Science 344(6186):838-843. http://science.sciencemag.org/content/sci/344/6186/838. full.pdf Overview of the history of inequality and Pikettys model of r > g. Note the Solow equilibrium on page 840 and the role of population growth. Ask yourselves what role population growth might have played in Figures 1,2,3, and 4.

(For derivation of Piketty's 2nd law, http://aida.wss.yale.edu/smith/piketty1.pdf, page 729)

# Week 4: Endogenous Growth and Resource Constraints

Lab: lab\_4\_thebet.Rmd

# Lecture A. Boserup, Technological Change, and When is A Digging Stick Better than a Plow?

- Ester Boserup (1976) "Environment, Population, and Technology in Primitive Societies", Population and Development Review 2(1):21-36 https://www.jstor.org/stable/pdf/1971529.pdf Note how agricultural technology responds to population and the effect of population density on nonagricultural technology
- David Malakoff (2011) "Are More People Necessarily A Problem?" Science (July 29) pp. 544-546. http://www.sciencemag.org/content/333/6042/544 Applying Boserup's logic to the contemporary world

#### Lecture B. Are We Doomed?

- David Lam (2011) "How the World Survived the Population Bomb: Lessons From 50 Years of Extraordinary Demographic History," *Demography* 48(4): 1231-1262. http://www.jstor.org/stable/41408189 The "reasonable" economic discussion of population growth and resources
- Stan Becker (2013). "Has the 'World' Really Survived the Population Bomb?" Demography 50(6), 2173-2181. http://www.jstor.org/stable/42919975 Brief criticism
- David Lam (2013). "Reply to Stan Becker..." the Population Bomb? *Demography*, 50(6), 2183-2186. http://www.jstor.org/stable/42919976 *Briefer reply*

# Week 5: Climate Change and (new topic) Age Pyramids

Lab: No lab

# Lecture A. Is Climate Change Inevitable?

- Tim Dyson (2005) "On Development, Demography and Climate Change: Te End of the World as We Know It?" Population and Environment 27(2):117-149 http://www.jstor.org/stable/27503954 An overview with an emphasis on the inevitability of climate change because of the continuing transition from to fossil fuels. Ask yourselves, is this paper from 2005 already out of date?
- Garrett Hardin (1968) "The Tragedy of the Commons," Science 162(3859): 1243-1248. http://science.sciencemag.org/content/162/3859/1243.full.pdf Classic article. Good to read before class.
- William Nordhaus (2015) "Climate Clubs to Overcome Free-Riding," Issues in Science and Technology 31(4):27-34. http://www.jstor.org/stable/24726920 Non-technical discussion by recent president of American Economic Association on solving the challenges of the climate commons with "climate clubs"

# Lecture B: Age-structured population dynamics and Age Pyramids

• TBA

# Week 6: The Demographic Transition and Population Aging

Lab: lab\_6\_aging.Rmd

# Lecture A. Dependency, Age-structure, and the Demographic Transition

• Ronald Lee (2003) "The Demographic Transition: Three Centuries of Fundamental Change," Journal of Economic Perspectives, 17(4):167-190. http://www.jstor.org/stable/3216936 An excellent overview of many themes in this course. For now, we focus on changes in dependency from age-structure shifts over the course of the demographic transition.

# Lecture B. Social Security and optimal age-structure?

• Ronald Lee et al. (2014) "Is low fertility really a problem? Population aging, dependency, and consumption," Science 346(6206):229-233. http://science.sciencemag.org/content/sci/346/6206/229.full.pdf Asks what age-structure is economically optimal using schedules of consumption and production (and the Solow model)

# Week 7: Mid-terms

Lab: No lab

Lecture A: Review and overflow

Lecture B: In-Class Exam

• No readings

# Week 8: How Do Economists Think We Decide How Many Children To Have?

Lab: lab\_8\_fertility.Rmd

# Lecture A. Quantity-quality tradeoff

• Gary Becker (1991) "The Demand for Children," Chapter 5 of A Treatise On The Family. Harvard University Press (1991) pp. 135-154. [eReader]

#### Lecture B. The cost of time

• TBA

# Week 9: Fertility: Applications

Lab: lab\_9\_recession.Rmd

# Lecture A. Did China's 1-Child Policy Reduce Fertility?

- Hesketh et al. (2005) "The Effect of China's One-Child Family Policy after 25 Years" New England Journal of Medicine 353:1171-1176. Overview of details and consequences of the one-child policy
- Feng, W. (2011). "The Future of a Demographic Overachiever: Long-Term Implications of the Demographic Transition in China." Population and Development Review 37:173-190. http://www.jstor.org/stable/41762404 Overview of Chinese past and future demography in comparative perspective
- Optional Wang Feng et al. "Population, Policy, and Politics: How will History Judge China's One-Child Policy" Population and Development Review 38(s1):115-129. http://www.jstor.org/stable/23655290 More detail on the politics of the 1CP

# Lecture B. Opportunity or Expense? Babies and the Great Recession in the United States

• Gretchen Livingston (2011) "In a Down Economy, Fewer Births," Social & Demographic Trends Pew Reserach Center, Washington, D.C. http://www.pewsocialtrends.org/files/2011/10/REVISITING-FERTILITY-AND-THE-RECESSION-FINAL.pdf An early look at the Recession

# Week 10: Marriage and Divorce

Lab: lab\_10\_marriage.Rmd

#### Lecture A. What is there besides love?

# Lecture B. Marriage and Inequality

- Gary Becker (1973) "A Theory of Marriage: Part 1" Journal of Political Economy 81(4):813-846.http://www.jstor.org/stable/pdf/1831130.pdf Read only Sections 1, 2, and 5. Don't worry about the math. Instead read to understand how Becker conceptualizes the decision to marry. It may be best to read the conclusion first.
- Gary Becker (1991) "The Evolution of the Family," Chapter 11 of A Treatise On The Family. Harvard University Press (1991) pp. 342-361. [eReader] An overview from the perspective of 1990, with a particular emphasis on the welfare state.
- Betsey Stevenson and Justin Wolfers (2007) "Marriage and Divorce: Changes and their Driving Forces," *Journal of Economic Perspectives* 21(2) 27-52. http://www.jstor.org/stable/30033716 *More recent changes*

# Week 11: Migration: Why Do People Move?

Lab: lab\_11\_mariel1.Rmd

#### Lecture A. The Cost of Closed Borders?

• Michael A. Clemens (2011) "Economics and Emigration: Trillion-Dollar Bills on the Sidewalk?" Journal of Economic Perspectives 25(3):83-106. https://www.jstor.org/stable/2304942 The gain to migrants themselves

# Lecture B. Why Do People Move to Megacities to be Unemployed?

• Michael P. Todaro (1969) "A Model of Labor Migration and Urban Unemployment in Less Developed Countries," American Economic Review 59(1):138-248. http://www.jstor.org/stable/1811100 Read only the introduction, pages 138-141, and the conclusion on page 147. We will go over a simplified version of the model in class.

# Week 12: Migration: Should Natives Fear for their Paychecks?

Lab: lab\_12\_mariel2.Rmd

#### Lecture A. Labor Market Effects of Immigration

- National Research Council (1997) The New Americans: Economic, Demography and Fiscal Effects of Immigration (National Academy Press) James Smith and Barry Edmonston, eds. Read pages 135-142 on "Immigration's Effects on Jobs and Wages: First Principles" and pages 228-239 on "Immigration's Effects on Jobs and Wages: Empirical Evidence" [eReader]
- National Research Council (2016) "Report Highlights: The Economic and Fiscal Consequences of Immigration" http://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse\_174349.pdf Executive summary of new report, which updates The New Americans

# Lecture B. Does Immigration Raise or Lower Taxes?

• National Research Council (1997) The New Americans: Economic, Demography and Fiscal Effects of Immigration (National Academy Press) James Smith and Barry Edmonston, eds. The chapter on "The Future Fiscal Impacts of Current Immigrants" is long, so focus on the introduction (pages 297-305), the age profiles of taxes and benefits (309-318), the results (pages 326-337), and the concluding discussion (pages 344-354).

# Week 13: Mortality, the Last Chapter

Lab: lab\_13\_preston.Rmd

# Lecture A. Preston Curves: Does economic growth reduce mortality?

• Preston, Samuel H. (1975) "The Changing Relation between Mortality and Level of Economic Development." Population Studies 29(2): 231-248. Classic article arguing that economic development not main force behind improvements in longevity https://www.jstor.org/stable/2173509

# Lecture B. Choosing Your Own Date of Death? Micro-economic Models of Mortality

• Jay Bhattacharya et al. (2013) Health Economics. New York: Palgrave. Read Chapter 3: "Demand for Health: The Grossman Model" pages 28-50 and Chapter 4: "Socioe-conomic Disparities in Health", pages 51-75.[eReader]

#### Week 14: No Class: Population Association of America Meetings