ECONOMICS 172: Issues in African Economic Development Professor Edward Miguel, Department of Economics (emiguel@berkeley.edu) SPRING 2017 SYLLABUS

<u>Description:</u> This course will examine leading issues in development economics, with a focus on Sub-Saharan Africa. This course will also explore the empirical methods used to rigorously measure the impact of development and anti-poverty programs.

<u>Prerequisites:</u> At least one prior term of intermediate economics (i.e., Economics 100A or 100B or equivalent), and some prior coursework in statistics or econometrics.

<u>Lectures:</u> Tuesday and Thursday 2:00 to 3:30pm, 277 Cory

Lectures will also be "screencast" by Berkeley Educational Technology Services and archived for future viewing online. Screencasting means that the presentation slides and lecturer audio are recorded. Lecture screencasts will be posted online with a one week delay. They will be posted to CalCentral on the Class Page for ECON 172, LEC 001. All students and GSIs will have access to this page via the My Academics tab. Recordings will also be available using the Webcasts tool in the class bCourses site.

<u>Teaching Assistants / Graduate Student Instructors (GSIs):</u>

Christina Brown (christinabrown@berkeley.edu)

Section 101: Monday 12-1pm, Latimer 102 Section 102: Monday 4-5pm, Dwinelle 254

Isabelle Cohen (<u>isabellemcohen@berkeley.edu</u>)

Section 103: Wednesday 5-6pm, Latimer 105 Section 104: Wednesday 6-7pm, Latimer 105

Office hours: Office hours are typically held on Fridays. Please email Corinne Cooper (ccooper@berkeley.edu) to make an appointment.

<u>Grading:</u> The course grade will be based on four components:

- (1) Three take-home assignments, each worth 10 percent (30 percent).
- -- Problem Set 1 handed out 2/2, due 2/9
- -- Problem Set 2 handed out 2/23, due 3/2
- -- Problem Set 3 handed out 4/6, due 4/13
- (2) Midterm examination (25 percent)
- -- The exam will take place in class on Tuesday March 14th, and will cover Lectures 1 to 15.
- (3) Final Examination (35 percent)
- -- The exam will take place during exam week on Monday May 8th, 11:30am to 2:30pm.
- (4) Class participation and attendance (10 percent)
- -- Student remarks, comments and questions in both lecture and section will contribute 5 percent to their grade in the course.

-- Lecture attendance and participation will also be evaluated using "clickers", and will contribute a further 5 percent to the grade. Every student is expected to obtain an "iClicker" from the Cal Bookstore. For those students using clickers for the first time: https://www.ets.berkeley.edu/services-facilities/clickers. Students are expected to bring their clickers to each lecture, and I will use them for polling the class and to assign both class attendance and participation credit. For each student, the four lectures with the lowest clicker "score" will be dropped. Clicker use will be required starting in week 2 of the class (namely, on Tuesday January 24th).

<u>Assignments:</u> The problem sets are designed to teach students how to apply various econometric methods using real data. Problem sets will require the use of R statistical software, which is commonly used in economics, and is open-source and freely available. We recommend that students install R on their computer. The GSI's, Christina and Isabelle, will help students gain familiarity with R during discussion sections.

<u>Grading policy:</u> Grading disputes must be put in writing and given to the GSI in section within two weeks from the date the graded problem set or exam was returned to the class.

<u>Special Accommodations:</u> If you need disability-related accommodations, have emergency medical information you wish to share with me, or need special arrangements in case the building must be evacuated, please inform me immediately by email or in office hours.

<u>Learning goals:</u> As part of Berkeley's Undergraduate Student Learning Initiative (USLI), the Economics Department has developed learning goals for the Economics major. See http://econ.berkeley.edu/undergrad/home/learning-goals. The specific learning goals which this course aims to achieve are:

I. Critical Thinking Skills

- CT2. Apply economic analysis to evaluate specific policy proposals.
- CT3. Compare arguments that have different conclusions to a specific issue or problem.
- CT4. Understand the role of assumptions in arguments.
- II. Ouantitative Reasonina Skills
- QT1. Understand how to use empirical evidence to evaluate an economic argument.
- OT2. Interpret statistical results.
- QT3. Conduct appropriate statistical analysis of data, and explain the statistical issues involved.
- QT4. Obtain and/or collect relevant data using specific quantitative research methods.
- III. Problem-Solving Skills
- PS1. Solve problems that have clear solutions.
- PS2. Propose solutions for problems that do not have clear answers, and indicate under what conditions they may be viable solutions.
- IV. Specialized Knowledge and Application of Skills
- SP1. Develop deeper critical and quantitative thinking skills and apply problem-solving skills to complex problems.
- V. Communication Skills
- CS1. Communicate effectively in written and graphical form about specific economic issues.

CS2. Formulate a well-organized written argument that states assumptions and hypotheses, which are supported by evidence.

VI. Lifelong Learning Skills

LL2. Know how to locate and use primary data sources

LL3. Understand and evaluate current economic events and new economic ideas.

<u>Honor Code:</u> The student community at U.C. Berkeley has adopted the following Honor Code: "As a member of the U.C. Berkeley community, I act with honesty, integrity, and respect for others." The hope and expectation is that you will adhere to this code.

<u>Required readings:</u> All syllabus readings will be posted on the bCourse pages, other than those from the required books (below). Reading packets of photocopied articles can also be picked up at Copy Central on Bancroft Ave.

<u>Required books:</u> Students should purchase the following books, all of which are paperback: Angrist, Joshua, and Jorn-Steffen Pischke. (2015). *Mastering 'Metrics: The Path from Cause to Effect*. Princeton University Press.

Fisman, Raymond and Edward Miguel (2008) *Economic Gangsters: Corruption, Violence and the Poverty of Nations*. Princeton University Press.

Miguel, Edward (2009) Africa's Turn? MIT Press.

* Optional for those who want a more detailed discussion of African history and societies: Grosz-Ngate, Maria, John H. Hanson, and Patrick O'Meara. (2014). *Africa, Fourth Edition*. Bloomington: University of Indiana Press. Free online: http://muse.jhu.edu/book/29099.

COURSE SYLLABUS

Lectures 1-2: Patterns of Global and African economic development (1/17, 1/19) *Africa's Turn?* pp. 1-46.

Economic Gangsters, Chapter 1, pp. 1-21.

United Nations Development Program (UNDP). (2015). *Human Development Report 2015*, Tables 1 and 8-10, pp. 201-211 and 234-245.

Lectures 3-4: Theories of economic growth (1/24, 1/26)

[Tools: Economic growth theory; Ordinary least squares (OLS) regression] Roland, Gerard. (2014). "Chapter 4: Economic Growth" in *Development Economics*, pp. 82-112.

Easterly, William (2001). "Chapter 3: Solow's Surprise: Investment is Not the Key to Growth" in *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*, pp. 47-69.

Mastering 'Metrics, Chapter 2, pp. 47-97.

Lectures 5-9: Geography, health and development (1/31, 2/2, 2/7, 2/9, 2/14)

[Tools: Randomized controlled trials (RCT); externalities] Bloom, David, and Jeffrey Sachs. (1998). "Geography, Demography, and Economic Growth in Africa," *Brookings Papers on Economic Activity*, 2, 207-295.

Economic Gangsters, chapter 8, pp. 186-206.

Mastering 'Metrics, Chapter 1, pp. 1-46.

* Optional for those who want a more technical discussion of the econometrics: Miguel, Edward, and Michael Kremer. (2004). "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities", *Econometrica*, 72(1), 159-217.

Lectures 10-12: The economics of HIV/AIDS (2/16, 2/21, 2/23)

[Tools: Difference-in-differences (DD) analysis; expected utility maximization] UNAIDS. (2016). *AIDS Fact Sheet November 2016*, pp. 1-8.

Fox, Matthew, et al. (2004). "The Impact of HIV/AIDS on Labour Productivity in Kenya", *Tropical Medicine and International Health*, 9(3), 318-324.

Mastering 'Metrics, Chapter 5, pp. 178-208.

Lectures 13-15: Investing in human capital (2/28, 3/2, 3/7)

[Tools: Regression discontinuity (RD)]

Kremer, Michael, Edward Miguel, and Rebecca Thornton. (2009). "Incentives to Learn: Merit Scholarships that Pay Kids to Do Well", *Review of Economics and Statistics*, 91(3), 437-456.

Lucas, Adrienne, and Isaac Mbiti. (2014). "Effects of School Quality on Student Achievement: Discontinuity Evidence from Kenya", *American Economic Journal: Applied Economics*, 6(3), 234-263.

Mastering 'Metrics, Chapter 4, pp. 147-177.

* Optional for those who want a more technical discussion: Friedman, Willa, Michael Kremer, Edward Miguel, and Rebecca Thornton. (2015). "Education as Liberation?", *Economica*, 83(329), 1-30.

Lectures 16-19: Climate and economic shocks in rural households (3/9, 3/16, 3/21, 3/23; Midterm in class 3/14)

[Tools: Field data collection; Instrumental variables (IV); spatial data] Udry, Christopher. (1990). "Credit Markets in Northern Nigeria: Credit as Insurance in a Rural Economy," *World Bank Economic Review*, 4(3), 251-269.

Economic Gangsters, chapters 5-6, pp. 111-158.

Mastering 'Metrics, Chapter 3, pp. 98-146.

* Optional for those who want a more technical discussion of the econometrics: Miguel, Edward, Shanker Satyanath, and Ernest Sergenti. (2004). "Economic Shocks and Civil Conflict: An Instrumental Variables Approach", *Journal of Political Economy*, 112(4), 725-753.

Lectures 20-22: Public goods, corruption and ethnic divisions (4/4, 4/6, 4/11-Guest) [Tools: Forensic data techniques] *Economic Gangsters*, chapter 4, pp. 76-110.

Burgess, Robin, Remi Jedwab, Edward Miguel, Ameet Morjaria, Gerard Padro-i-Miquel. (2015). "The Value of Democracy: Evidence from Road Building in Kenya", *American Economic Review*, 105(6), 1817-1851.

Miguel, Edward. (2004). "Tribe or Nation? Nation-building and Public Goods in Kenya versus Tanzania", *World Politics*, 56(3), 327-362.

Lectures 23-24: Historical Legacies of Slavery and Colonialism (4/13-Guest, 4/18) [Tools: Assembling historical data]

Nunn, Nathan. (2010). "Shackled to the Past: The Causes and Consequences of Africa's Slave Trade", in Jared Diamond and James A. Robinson (eds.) *Natural Experiments of History*, Cambridge University Press, pp. 142-184.

Bates, Robert. (1981). *Markets and States in Tropical Africa*, Chapters 1-2, pp. 1-44.

* Optional for those who want a more detailed discussion of economic history: Lowes, Sara, and Eduardo Montero. (2017). "Blood Rubber: The Effect of Labor Coercion on Institutions and Culture in the DRC", unpublished working paper.

Lectures 25-27: Current Successes and Future Challenges (4/20, 4/25, 4/27)

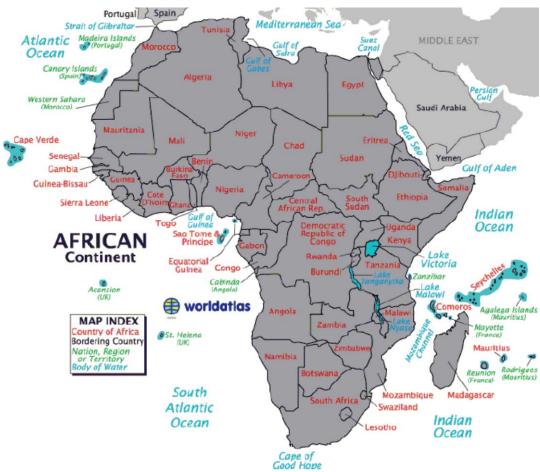
[Tools: Pre-analysis plans]

Acemoglu, Daron, Simon Johnson, and James Robinson. (2003). "Chapter 4: An African Success Story: Botswana," in *In Search of Prosperity: Analytic Narratives on Economic Growth*, pp, 80-119.

Casey, Katherine, Rachel Glennerster, Edward Miguel. (2012). "Reshaping Institutions: Evidence on Aid Impacts Using a Pre-Analysis Plan", *Quarterly Journal of Economics*, 127(4), 1755-1812.

Rodrik, Dani. (2016). "An African Growth Miracle?", Journal of African Economies, 1-18.

Africa's Turn?, pp. 49-137



Map of Africa, today