

**ECONOMICS 172: Case Studies in Economic Development**  
**Issues in African Economic Development**  
**SPRING 2021 SYLLABUS**

**Prof. Edward Miguel, Department of Economics ([emiguel@berkeley.edu](mailto:emiguel@berkeley.edu))**

Description: 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 assess the impact of international development and anti-poverty programs.

Prerequisites: At least one prior term of intermediate economics (i.e., Economics 100A or equivalent). Some prior coursework in statistics or econometrics (i.e., Economics 140/141 or equivalent) is strongly recommended.

**Course Logistics**

Lectures: Tuesday and Thursday 2:00 to 3:30 pm PT on Zoom.

Lectures will also be recorded on Zoom for later viewing. I strongly encourage all students to participate “live” (if able), given the importance of the class discussion, questions and answers, and polls to student learning. Those living in time zones where watching live is challenging are welcome to only watch the recordings. These recordings will be available on the class bCourses site.

Teaching Assistants / Graduate Student Instructors (GSIs):

Roberto Rocha ([robertohsurocha@berkeley.edu](mailto:robertohsurocha@berkeley.edu))

Section 101: Mondays 2-3pm

Section 102: Tuesdays 10-11am

Section 106: Fridays 9-10am

Jed Silver ([jed\\_silver@berkeley.edu](mailto:jed_silver@berkeley.edu))

Section 103: Wednesdays 3-4pm

Section 104: Thursdays 9-10am

Section 105: Thursdays 5-6pm

Office hours: Please make an appointment for Prof. Miguel’s office hours online at <https://bit.ly/2QQeCAv>.

Enrollment: All enrollment questions should be sent to the Department of Economics Head GSI, John Wieselthier, at [headgsi@econ.berkeley.edu](mailto:headgsi@econ.berkeley.edu). Requests to be added to the bCourses page should be directed to the GSI’s (Jed and Roberto).

## Course Grading

Grading: The course grade will be based on four components:

(1) Three individual take-home assignments, each worth 10 percent (30 percent):

-- Problem Set 1 handed out 2/16, due 2/23

-- Problem Set 2 handed out 3/2, due 3/9

-- Problem Set 3 handed out 4/15, due 4/22

The problem sets are designed to teach students how to apply econometric methods using real data. They require the use of an open-source statistical software called R, which is commonly used in economics. We recommend that students access RStudio to write and run R code using a Berkeley cloud computing environment called DataHub to complete their assignments. Using RStudio via DataHub will allow students to work on their assignment from any web browser and will provide ready access to all R packages necessary to complete the assignments. Solutions to the assignments will also be distributed through DataHub. The GSIs, Roberto and Jed, will provide more details on how to access RStudio using the cloud computing environment in the first discussion section. As an alternative, students may choose to install R and RStudio on their computer. Students choosing to do so can download or update to the latest version of R and RStudio (<https://www.r-project.org> and <https://www.rstudio.com/products/rstudio/download/>), and may need to install additional packages to complete the assignments. The GSI's will help students gain familiarity with R in section. They will also introduce the dynamic document format RMarkdown (available within RStudio), which allows students to combine the narrative components of the assignment with their statistical code and its output into one document, to be submitted as a PDF. Solutions will also be in this format.

(2) Midterm examination (28 percent)

-- The exam will take place on Tuesday March 16<sup>th</sup> (during the class period, 2:10 to 3:30pm PT) and cover Lectures 1 to 15. Those living in a time zone where it is impractical to take the live exam will take a different version of the exam at an alternative administration time several hours later.

(3) Final Examination (40 percent)

-- The final will take place during the regular time (for Exam Group 2) on Monday May 10<sup>th</sup> from 11:30am to 2:30pm PT. It will be cumulative, covering Lectures 1 to 27. Those living in time zones where it is impractical to take the "live" exam will take a different version of the exam at an alternative administration time several hours later. Those who have conflicts with other finals will also be asked to participate in the alternative administration.

(4) Class participation and attendance (2 percent)

-- The quality of remarks, questions and involvement in lecture (including participation in student polls) and in section will each contribute 1 percent to the final grade.

Late assignments: Problem sets turned in late will lose 3 points during the first 24 hours after the assignment is due, and 1 additional point for each subsequent 24 hours. Problem sets submitted after solutions are posted will receive zero points.

Grading policy: Grading disputes must be put in emails sent to your GSI within one week from the date the graded problem set or exam was returned to the class. Please be specific in describing why you think there was a grading error, and why you believe you deserve significantly more points. Once they do re-grade a problem set or exam, the GSI's may choose to re-grade the entire assignment (not just the problem in question), which of course may result in a higher or lower overall score.

## **Course Readings**

Required readings: All syllabus readings are posted on the bCourses page, other than those from the required books (below).

Required books: Students should purchase the following three books, all of which are available in 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 materials:

A free online source containing a 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, <http://muse.jhu.edu/book/29099>.

A free online textbook of African economic history:

Frankema, E., Hillbom, E., Kufakurinani, U., Meier zu Selhausen, F., eds. (2018). *The History of African Development. An Online Textbook for a New Generation of African Students and Teachers*. African Economic History Network, <https://www.aehnetwork.org/textbook/>.

A free online reference for basic econometrics using R:

Hanck, Christoph, Martin Arnold, Alexander Gerber and Martin Schmelzer. (2018). *Introduction to Econometrics with R*, <https://www.econometrics-with-r.org/>.

A textbook on the political economy of contemporary African development:

Christensen, Darin, and David D. Laitin. (2019). *African States since Independence: Order, Development, and Democracy*, Yale University Press, <https://african-states-book.info/>.

The Afrobarometer project contains data and reports on African economies, politics and society: see <https://www.afrobarometer.org/> and <https://www.afrobarometer.org/pan-africa-profiles>.

A good resource on African political economy is the weekly Ufahamu Africa podcast, which is hosted out of U.C. Riverside: <https://ufahamufrica.com/tag/podcast/>.

## **Course Polices**

Berkeley Honor Code: 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 all students and course instructors will adhere to this code at all times.

Academic Honesty Policy: Cheating will be harshly punished. Any evidence of cheating will result in a score of zero (0) on that assignment. Cheating on the midterm or the final exam results in an "F" for the course. Cheating includes, but is not limited, to bringing written or electronic materials into an exam, using written or electronic materials during an exam (including online exams), copying off another person's exam or assignment, allowing someone to copy off of your exam or assignment, communicating with other students during an exam (including online exams), having someone take an exam or complete an assignment for you, changing an exam answer after an exam is graded, and plagiarizing written or other materials. Incidences of cheating are reported to Center for Student Conduct, which administers additional punishment; see also <http://sa.berkeley.edu/conduct/students/standards>.

Special Accommodations: If you require disability-related accommodations for exams or lecture or if you have emergency medical information that you wish to share, please email or speak with your GSI as soon as possible. At least two (2) weeks before an exam, you must also obtain a Letter of Accommodation (LOA) from Disabled Students' Program (<http://dsp.berkeley.edu>, 260 César Chávez Center) which they send electronically to me and the GSI's. DSP's Proctoring Service requires notice of participants at least two weeks in advance of an exam. Accommodations are not offered retroactively.

Limits to Confidentiality: As University of California employees, all course instructors are Responsible Employees and we are required to report incidents of sexual violence, harassment or other conduct prohibited by university policy to the Title IX officer. We cannot keep reports confidential, but the Title IX officer will consider requests for confidentiality. There are confidential resources available, including the CARE Advocate Office (<http://sa.berkeley.edu/dean/confidential-care-advocate>).

COVID-19: The ongoing pandemic has made many aspects of our lives more challenging, including studying and learning (and teaching). I want to let you know that the GSI's and I are committed to being as accommodating and flexible as possible during this unusual time – including regarding any health and any other personal challenges that you are facing – and we hope you will also be understanding of any shortcomings on our side. Let's all work together to make this a productive and fun semester, despite everything.

## COURSE SYLLABUS

### **Lectures 1-2: Patterns of Global and African economic development (1/19, 1/21)**

*Africa's Turn?* pp. 1-46.

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

United Nations Development Program (UNDP). (2020). *Human Development Report 2020*, Tables 1-4, pp. 343-360.

### **Lectures 3-4: Theories of economic growth (1/26, 1/28)**

[Tools: Economic growth theory; Ordinary least squares (OLS) regression]

Taylor, J. Edward, and Travis J. Lybbert. (2020). "Chapter 7: Growth" in *Essentials of Development Economics, Third Edition*, pp. 145-168.

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

### **Lectures 5-9: Geography, health & development (2/2, 2/4, 2/9, 2/11, 2/16)**

[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:

Miguel, Edward, and Michael Kremer. (2004). "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities", *Econometrica*, 72(1), 159-217.

\* Optional for those who want to learn more about RCT's in development economics:

Nobel Committee. (2019). "Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2019: Understanding Development and Poverty Alleviation", pp. 1-41.

### **Lectures 10-12: Epidemics and economic development (2/18, 2/23, 2/25)**

[Tools: Difference-in-differences (DD) analysis; expected utility maximization]

UNAIDS. (2018). *UNAIDS Data 2018*, pp. 4-29 and 68-75.

Fox, Matthew P., Sydney Rosen, William B. MacLeod, Monique Wasunna, Margaret Bii, Ginamarie Foglia, and Jonathan L. Simon. (2004). "The Impact of HIV/AIDS on Labour Productivity in Kenya", *Tropical Medicine and International Health*, 9(3), 318-324.

Egger, Dennis, et a. (2021). "Falling Living Standards during the COVID-19 Crisis: Quantitative Evidence from Nine Developing Countries", forthcoming *Science Advances*.

Shesgreen, Deirdre. (2020). "Senegal's quiet COVID success: Test results in 24 hours, temperature checks at every store, no fights over masks", *USA Today*, September 6, 2020.

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

### **Lectures 13-15: Investing in human capital (3/2, 3/4, 3/9)**

[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 detailed discussion:

Friedman, Willa, Michael Kremer, Edward Miguel, and Rebecca Thornton. (2015). "Education as Liberation?", *Economica*, 83(329), 1-30.

Nyerere, Julius. (1974), "Chapter 13: Education for Liberation", pp. 121-132 in *Nyerere on Education: Selected Essays and Speeches, 1954-1998*, eds. Elieshi Lema, Marjorie Mbilinyi, and Rakesh Rajani. HakiElimu: Dar es Salaam (2004).

### **Lectures 16-18: Climate and economic shocks in rural households (3/11, 3/18, 3/30; Midterm during class meeting on 3/16; Spring Break 3/23 and 3/25)**

[Tools: Field data collection; Instrumental variables (IV); spatial data]

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

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

\* Optional for those who want a more technical discussion:

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.

\* Optional content: TEDxBerkeley 2014 talk on climate, conflict & economic development: [https://www.youtube.com/watch?v=jemGxRn0Ea8&index=16&list=PLsRNoUx8w3rMMpfzZjF\[gj9G\]ypZR0mL1](https://www.youtube.com/watch?v=jemGxRn0Ea8&index=16&list=PLsRNoUx8w3rMMpfzZjF[gj9G]ypZR0mL1).

### **Lectures 19-21: Corruption and public goods (4/1, 4/6, 4/8)**

[Tools: Forensic data techniques]

*Economic Gangsters*, chapter 4, pp. 76-110.

Isaksson, Ann-Sofie, and Andreas Kotsadam. (2018). "Chinese aid and local corruption", *Journal of Public Economics*, 159, 146-159.

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

\* Optional content: The 2019 film "The Boy who Harnessed the Wind" is a dramatic telling of the true story of a Malawi teenager who tries to save his family from drought and famine: <https://www.imdb.com/title/tt7533152/>.

### **Lectures 22-25: Historical Legacies of Slavery & Colonialism (4/13, 4/15, 4/20, 4/22)**

[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.

Lowes, Sara, and Eduardo Montero. (2020). "Mistrust in Medicine: The Legacy of Colonial Medical Campaigns in Central Africa", forthcoming *American Economic Review*.

Archibong, Belinda, and Nonso Obikili. (2020). "Prison Labor: The Price of Prisons and the Lasting Effects of Incarceration", unpublished working paper.

\* Optional for those who want a more detailed discussion:

Asante, Kofi Takyi. (2018). "Chapter 11: National Movements in Colonial Africa", in Frankema, E., et al. eds. (2018). *The History of African Development. An Online Textbook for a New Generation of African Students and Teachers*. African Economic History Network.

### **Lectures 26-27: Current Successes & Future Challenges (4/27, 4/29)**

[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.

Kynge, James, and Jonathan Wheatley. (2020). "China pulls back from the world: rethinking Xi's 'project of the century'", *Financial Times*, December 11, 2020.

Lee, Kenneth, Edward Miguel, and Catherine Wolfram. (2020). "Experimental Evidence on the Economics of Rural Electrification", *Journal of Political Economy*, 128(4): 1523-1565.

Mbate, Michael. (2015). "Can Africa Diversify its Exports? Lessons from Ethiopia", *Development*, 58(4), 614-619.

*Africa's Turn?*, pp. 49-137

\*Optional content: The 2016 film "A United Kingdom" is a popularized telling of the struggle for Botswanan independence: <https://www.imdb.com/title/tt3387266/>.

