# **Economics 270B: Development Economics (Ph.D. course)**

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#### **SPRING 2022 SYLLABUS**

Version: January 13, 2022

**<u>Description:</u>** This course covers current research topics and methods in Development Economics. It is appropriate for Ph.D. students in Economics and related fields.

**Prerequisites:** Graduate coursework in economic theory and econometrics.

#### **Course Logistics**

Lectures: Monday 2-4 pm PT in Evans 597.

#### Office hours:

For Prof. Kaur, please sign up for office hours online at <a href="www.supreetkaur.com">www.supreetkaur.com</a>. For Prof. Miguel, please sign up for office hours online at <a href="https://bit.ly/2QQeCAv">https://bit.ly/2QQeCAv</a>.

**Extra office hours:** Madeline Duhon (mduhon@berkeley.edu) will serve as an additional resource person for the course.

#### **Course Assignments and Grading:**

(Note: assignments should be uploaded on bCourses by 2pm PT on the due date.)

- (1) Referee reports on papers by job market candidates (30 percent):
- -- Each referee report should be no more than 3 pages double-spaced. The report should start off with a one paragraph summary of the main argument of the article. You should describe your main 3-4 points in detail <u>as if you were writing directly to the author</u>. Conclude the report with more minor comments. A good referee report not only clearly states the shortcomings of the work, but also lays out constructive, detailed and realistic suggestions for improvement. Prof. Alain de Janvry has prepared a useful guide to writing referee reports: <a href="https://are.berkeley.edu/courses/ARE251/2004/assignments/RRGuidelines.pdf">https://are.berkeley.edu/courses/ARE251/2004/assignments/RRGuidelines.pdf</a>.
- -- These assignments will allow you to read and critique papers on the research frontier of
- development economics, and get a concrete sense of the quality of work being done by leading Ph.D. candidates in the field. These papers are also posted on bCourses.
- -- Report 1 on <u>Niharika Singh</u> (Columbia University), "Hiring Frictions in Urban Labor Markets: Experimental Evidence from India", due Friday 2/4
- -- Report 2 on <u>Nathan Barker</u> (Yale University), "The Effects of Female Land Inheritance on Economic Productivity in Ghana", <u>due Friday 3/4</u>
- -- Report 3 on <u>Kevin Carney</u> (Harvard University), "The Effect of Social Media on Voters: Experimental Evidence from an Indian Election", <u>due Friday 3/18</u>

\* Extra credit option for each referee report: please critically assess the presentation of data in each of the referee report papers. You can receive one point of extra credit for each report if you also include a detailed discussion of the shortcomings of one particular table / figure in the paper, and the concrete modifications you would make to improve the presentation of the data. (This does not count toward the 3 page limit for the referee report itself. Please restrict yourself to 1 page for this additional discussion of data presentation.) For a classic treatment on the presentation of quantitative data, refer to: Tufte, Edward R. (1983). *The Visual Display of Quantitative Information*. Cheshire: Graphics Press.

# (2) Two problem sets (30 percent):

-- Problem set 1, posted by Friday 2/4 and due Friday 2/18

PS1 will require you to work through theoretical and conceptual exercises related to consumption smoothing under market imperfections. This will include application of the Euler equation under credit constraints, and consumption and portfolio choice under uncertainty.

### -- Problem set 2, posted by Friday 3/18 and due Friday 4/8

PS2 will require replication, manipulation and econometric analysis of a dataset used in a published paper. You will apply some of the methods and approaches from the course to real data, and we will ask you to interpret the results. The assignment provides practice in applying econometric methods to data, something most of you will need to do in your own research.

- (3) One research proposal, 8-9 pages (30 percent):
- The research proposal should briefly (3-4 pages) survey an existing literature in Development Economics, and then describe a planned research project (5-6 pages). Proposals should be in 12 point font, double-spaced with 1 inch margins. Proposals exceeding 9 pages in length will lose credit. This assignment will encourage you to generate, refine and receive feedback on a research idea that might form part of your dissertation.
- -- The research proposal is <u>due Friday 5/6</u> at 2pm (uploaded on bCourses).
- (4) Class participation (10 percent): In borderline cases, attendance at lecture and the quality of classroom comments may be a factor in assigning grades. Active class participation enriches the course, benefiting other students (and us), and is highly encouraged.
- (5) Exams: There are no exams for this course. The Development Economics Ph.D. Field Exam this summer will cover all readings on this syllabus (as well as material from Econ 270A, 270C).

#### **Course Policies**

**Special Accommodations:** If you need disability-related accommodations in this class, please inform us immediately by email or in office hours.

**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 copying off another person's assignment, allowing someone to copy off of your assignment, having someone else do an assignment for you, and plagiarizing written or other materials. Incidences of cheating are reported to the Center for Student Conduct, which administers additional punishment. See also <a href="http://sa.berkeley.edu/conduct/students/standards">http://sa.berkeley.edu/conduct/students/standards</a>.

<u>Limits to Confidentiality:</u> 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 (<a href="http://sa.berkeley.edu/dean/confidential-care-advocate">http://sa.berkeley.edu/dean/confidential-care-advocate</a>).

**COVID-19:** The ongoing pandemic has made many aspects of our lives more challenging, including studying and learning (and teaching). We want to let you know that we are committed to being as accommodating and flexible as possible during these unusual times – 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 SCHEDULE - SPRING 2022**

Date	#	Topic	Instructor	Notes
1/24	1	Understanding growth and development	Both	
1/31	2	Consumption smoothing I	Kaur	Referee report 1 due 2/4
2/07	3	Consumption smoothing II	Kaur	
2/14	4	Poverty traps	Kaur	Problem set 1 due 2/18
2/21		No Lecture – President's Day		
2/25**	5	Research design	Kaur	Special Friday lecture
2/28	6	Labor markets	Kaur	Referee report 2 due 3/4
3/07	7	Behavioral development economics	Kaur	
3/14	8	Education I	Miguel	Referee report 2 due 3/18
3/21**		No Lecture – Spring Break		Please do these readings: Education II (+slides posted)
3/28	9	Health/nutrition I	Miguel	, , , ,
4/04	10	Health/nutrition II	Miguel	Problem Set 2 due 4/8
4/11	11	Institutions, Democracy and Development	Miguel	
4/18	12	Corruption	*Finan (guest)	
4/25	13	The Political Economy of Conflict	Miguel	
5/02	14	Infrastructure and general equilibrium effects	Miguel	
				Research proposal due 5/6

# **COURSE SYLLABUS**

# I. Overview of international economic development

# Lecture 1: Understanding economic growth and development (1/24)

Aiken, Emily, Suzanne Bellue, Dean Karlan, Chris Udry, and Joshua Blumenstock. (2022). "Machine Learning and Phone Data Can Improve Targeting of Humanitarian Aid", unpublished working paper, University of California, Berkeley.

Banerjee, Abhijit and Esther Duflo (2007). "The Economic Lives of the Poor", *Journal of Economic Perspectives*, 21(1), 141-167.

Deaton, Angus. (2005). "Measuring Poverty in a Growing World (or Measuring Growth in a Poor World)," *Review of Economics and Statistics*, 87(1), 1-19.

Henderson, J. Vernon, Adam Storeygard, and David N. Weil. (2012). "Measuring Economic Growth from Outer Space", *American Economic Review*, 102(2), 994-1028.

#### Additional readings:

Burke, Marshall, Anne Driscoll, David B. Lobell, and Stefano Ermon. (2021). "Using satellite imagery to understand and promote sustainable development", *Science*, 371, eabe8628.

Jones, Charles I. (2016). "The Facts of Economic Growth", *Handbook of Macroeconomics*, Vol. 2A, (eds.) John B. Taylor and Harald Uhlig, Elsevier B.V.

#### **II. Market frictions and smoothing - consumption and labor**

#### Lecture 2: Consumption smoothing I (1/31)

Jayachandran, Seema (2006). "Selling Labor Low: Wage Responses to Productivity Shocks in Developing Countries," *Journal of Political Economy*, 114(3), 538-575.

#### Additional Readings:

[Background: Romer, David, *Advanced Macroeconomics*, Sections: 8.1-8.2 (Consumption under uncertainty), 8.4 (Interest rate and saving), and 8.6 (Buffer stocks and precautionary savings). You can alternately look at POG's notes on the same topic.]

Adhvaryu, Achyuta, Anant Nyshadham, and Namrata Kala. 2019. "Booms, Busts, and Household Enterprise: Evidence from Coffee Farmers in Tanzania." *World Bank Economic Review*, December.

Burke, Marshall, Lauren Falcao Bergquist, and Edward Miguel. (2019). "Sell Low and Buy High: Arbitrage and Local Price Effects in Kenyan Markets", *Quarterly Journal of Economics*, 134(2): 785-842.

Paxson, Christina (1992). "Using Weather Variability to Estimate the Response of Savings to Transitory Income in Thailand," *American Economic Review*, 82(1): pp. 15-33.

### Lecture 3: Consumption smoothing II (2/7)

Fink, G., B.K. Jack and F. Masiye (2020) "Seasonal liquidity, rural labor markets and agricultural production." *American Economic Review*, 110(11): 3351–3392.

# Additional Readings:

[Background: Romer, David, *Advanced Macroeconomics*, Section 8.5 (Consumption and risky assets, consumption CAPM).]

Bardhan, Pranab and Chris Udry (1999). *Development Microeconomics*, Chapter 8 - "Risk and Insurance in an Agricultural Economy."

Karlan, Dean, et al. (2013). "Agricultural Decisions after Relaxing Credit and Risk Constraints," *Quarterly Journal of Economics*, 129(2): 597-652.

Townsend, Robert (1994). "Risk and Insurance in Village India," Econometrica, 62(3): 539-591.

### Lecture 4: Poverty traps (2/14)

Balboni, Clare, Oriana Bandiera, Robin Burgess, Maitreesh Ghatak and Anton Heil. (2021). "Why Do People Stay Poor?", *Quarterly Journal of Economics*, doi: 10.1093/gje/gjab045.

#### Additional Readings:

Banerjee, Abhijit and Esther Duflo (2005). "Growth Theory through the Lens of Development Economics," in Aghion, Philippe and Steven Durlauf (eds), *Handbook of Economic Growth*, vol. 1A.

Banerjee, Abhijit and A. Newman (1993). "Occupational Choice and the Process of Development," *Journal of Political Economy* 101, 274-298.

Banerjee, Abhijit, Emily Breza, Esther Duflo, and Cynthia Kinnan (2019). "Can Microfinance Unlock a Poverty Trap for Some Entrepreneurs?" Working paper.

Dasgupta, Partha and Debraj Ray (1986). "Inequality as a Determinant of Malnutrition and Unemployment: Theory." *The Economic Journal*, 96(384): 1011-1034.

Murphy, Kevin, Shleifer, Andrei and R. Vishny (1989). "Industrialization and the Big Push," *Journal of Political Economy* 97, 1003-1026.

**Lecture 5: Research design and finding a job market paper (2/25)\*\*** (Extra Friday lecture) Kaur, Supreet (2019). "Nominal Wage Rigidity in Village Labor Markets." *American Economic Review*, 109(10): 3585-3616.

Breza, Emily, Supreet Kaur, and Yogita Shamdasani (2017). "The Morale Effects of Pay Inequality." *Quarterly Journal of Economics*, 133(2): 611-663. (Sections 1-3).

#### Additional Readings

Christensen, Garret S., and Edward Miguel. (2018). "Transparency, Reproducibility, and the Credibility of Economics Research", *Journal of Economic Literature*, 56(3), 920-980.

Mullainathan, Sendhil, Jens Ludwig, and Jeff Kling. (2011). "Mechanism Experiments and Policy Evaluations." *Journal of Economic Perspectives*, 25(3): 17-38

#### Lecture 6: Labor markets (2/28)

Breza, Emily, Supreet Kaur, and Yogita Shamdasani (2021). "Labor Rationing." *American Economic Review*, 2021. 111(10): 3184-3224.

#### Additional Readings

Bryan, G., S. Chowdhury, and A. Mobarak. (2014). "Underinvestment in a Profitable Technology: The Case of Seasonal Migration in Bangladesh", *Econometrica*, 82, 1671-1748.

Carranza, Eliana, Aletheia Donald, Florian Grosset, and Supreet Kaur (2021). "The Social Tax: Redistributive Pressure and Labor Supply." Working Paper.

Carranza, Eliana, Robert Garlick, Kate Orkin, Neil Rankin (2021). "Job Search and Hiring with Limited Information about Workseekers' Skills," Working Paper. (Revise and resubmit, *American Economic Review*).

Imbert, Clement and John Papp (2015). "Labor Market Effects of Social Programs: Evidence from India's Employment Guarantee." *American Economic Journal: Applied Economics*, 7(2): 233-63.

Kaur, Supreet (2019). "Nominal Wage Rigidity in Village Labor Markets." *American Economic Review*, 109(10): 3585-3616.

McKenzie, David (2017). "How Effective Are Active Labor Market Policies in Developing Countries? A Critical Review of Recent Evidence." *The World Bank Research Observer*, 32(2): 127–154.

#### **III. Behavioral Development**

# Lecture 7: Behavioral development economics (3/7)

Kaur, Supreet, Sendhil Mullainathan, Suanna Oh, and Frank Schilbach (2021). "Do Financial Concerns Make Workers Less Productive?" NBER Working Paper No. 28338.

#### Additional Readings

[Background: DellaVigna, Stefano (2009). "Psychology and Economics: Evidence from the Field," *Journal of Economic Literature*, 47(2). Sections: 1; 2.1.1-2.1.3; 2.2.1-2.2.2; 2.3.1-2.3.2, 2.3.5; 4.1-4.2.1] \*\*Note: If you are not taking the psychology and economics field course, you will get much more out of lecture if you read at least the beginning assigned sections of this background article.

Achyuta Adhvaryu, James Fenske, Anant Nyshadham (2019). "Early Life Circumstance and Adult Mental Health." *Journal of Political Economy*, 127(4): 1516-1549.

Baranov, Victoria, Sonia Bhalotra, Pietro Biroli, and Joanna Maselko (2020). "Maternal Depression, Women's Empowerment, and Parental Investment: Evidence from a Randomized Control Trial." *American Economic Review*, 110(3): 824-859.

Hanna, Rema, Sendhil Mullainathan, and Joshua Schwartzstein (2014). "Learning through Noticing: Theory and Evidence from a Field Experiment." *Quarterly Journal of Economics*, 129(3): 1311–1353.

Kaur, Supreet, Michael Kremer, and Sendhil Mullainathan (2015). "Self-Control at Work." *Journal of Political Economy*. 123(6): 1227-1277.

Kremer, Michael, Gautam Rao, and Frank Schilbach (2019). "Behavioral Development Economics." *Handbook of Behavioral Economics*, Volume 2.

Ridley, Matthew, Gautam Rao, Frank Schilbach, and Vikram Patel. (2020). "Poverty, Depression, and Anxiety: Causal Evidence and Mechanisms," *Science*, 370(6522).

## IV. Human capital in economic development

# **Lecture 8: Education I (3/14)**

Ganimian, Alejandro J., Karthik Muralidharan, and Christopher R. Walters. (2021). "Augmenting State Capacity for Child Development: Experimental Evidence from India", NBER Working Paper #28780.

Mbiti, Isaac, Karthik Muralidharan, Mauricio Romero, Youdi Schipper, Constantine Manda, and Rakesh Rajani. (2019). "Inputs, Incentives, and Complementarities in Education: Experimental Evidence from Tanzania", *Quarterly Journal of Economics*, 134(3), 1627-1673.

Muralidharan, Karthik and Venkatesh Sundararaman. (2011). "Teacher Performance Pay: Experimental Evidence from India", *Journal of Political Economy*, 119(1), 39-77.

## Additional readings:

Glennerster, Rachel, and Kudzai and Takavarasha. (2013). *Running Randomized Evaluations: A Practical Guide*. Princeton University Press.

Muralidharan, Karthik, Abhijeet Singh, and Alejandro Ganimian. (2019). "Disrupting Education? Experimental Evidence on Technology-Aided Instruction in India", *American Economic Review*, 109(4), 1426-1460.

Royal Swedish Academy of Sciences. (2019). "Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel: Understanding Development and Poverty Alleviation"

[https://www.nobelprize.org/uploads/2019/10/advanced-economicsciencesprize2019.pdf].

# Extra Topic 1: Education II (Readings for week of 3/21 – No lecture, Spring Break) Akresh, Richard, Daniel Halim, and Marieke Kleemans. (2018). "Long-term and intergenerational Effects of Education: Evidence from School Construction in Indonesia", working paper.

Azevedo, João Pedro, Amer Hasan, Diana Goldemberg, Syedah Aroob Iqbal, and Koen Geven. (2020). "Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates," World Bank Policy Research Working Paper 9284.

Baird, Sarah, Craig McIntosh, and Berk Ozler. (2011). "Cash or condition? Evidence from a Randomized Cash Transfer Program", *Quarterly Journal of Economics*, 126(4), 1709-1753.

Duflo, Esther. (2001). "Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment," *American Economic Review*, 91(4).

#### Additional readings:

Krueger, Alan and Mikael Lindahl. (2001). "Education for Growth: Why and For Whom?" *Journal of Economic Literature*, 39 (4), 1101-1136.

### Lecture 9: Health and nutrition I (3/28)

Abaluck, Jason, et al. (2021). "Impact of Community Masking on COVID-19: A Cluster-randomized Trial in Bangladesh", *Science*, doi: 10.1126/science.abi9069.

Das, Jishnu, Alaka Holla, Aakash Mohpal, and Karthik Muralidharan. (2016). "Quality and Accountability in Health Care Delivery: Audit-study Evidence from Primary Care in India", *American Economic Review*, 106(12), 3765-3799.

Dupas, Pascaline. (2014). "Short-run subsidies and long-run adoption of new health products: Evidence from a field experiment", *Econometrica*, 82(1), 197-228.

Karing, Anne. (2021). "Social Signaling and Childhood Immunization: A Field Experiment in Sierra Leone", working paper.

# Additional readings:

Dupas, Pascaline, and Edward Miguel. (2017). "Impacts and Determinants of Health Levels in Low-Income Countries", *Handbook of Field Experiments*, (eds.) Esther Duflo and Abhijit Banerjee.

#### Lecture 10: Health and nutrition II (4/4)

Alsan, Marcella. (2015). "The Effect of the TseTse fly on African Development", *American Economic Review*, 105(1), 382-410.

Hamory, Joan, Edward Miguel, Michael Walker, Michael Kremer, and Sarah Baird. (2021). "Twenty Year Economic Impacts of Deworming", *Proceedings of the National Academy of Sciences*, 118(14): e2023185118, doi: 10.1073/pnas.2023185118.

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

#### Additional readings:

Miguel, Edward, and A. Mushfiq Mobarak. (2022). "The Economics of the COVID-19 Pandemic in Poor Countries", forthcoming *Annual Review of Economics*.

#### V. Political economy

#### Lecture 11: Institutions, democracy and development (4/11)

Acemoglu, Daron, Suresh Naidu, Pascual Restrepo, and James A. Robinson. (2019). "Democracy Does Cause Growth", *Journal of Political Economy*, 127(1), 47-100.

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.

Weigel, Jonathan L. (2020). "The Participation Dividend of Taxation: How Citizens in Congo Engage More with the State when it Tries to Tax Them", *Quarterly Journal of Economics*, 1849–1903, doi: 10.1093/qje/qjaa019.

#### Additional readings:

Dal Bó, Ernesto, Frederico Finan, and Martín A. Rossi (2013) "Strengthening State Capabilities: The Role of Financial Incentives in the Call to Public Service", *Quarterly Journal of Economics*, 128(3), 1169-1218.

Gine, Xavier, and Ghazala Mansuri. (2018). "Together We Will: Experimental Evidence on Female Voting Behavior in Pakistan", *American Economic Journal: Applied Economics*, 10(1): 207-235.

#### Lecture 12: Corruption (4/18) - Guest Lecture Prof. Fred Finan

Avis, Eric, Claudio Ferraz, and Frederico Finan. (2017). "Do Government Audits Reduce Corruption? Estimating the Impacts of Exposing Corrupt Politicians", *Journal of Political Economy*, forthcoming.

Olken, Ben and Patrick Barron. (2009). "The Simple Economics of Extortion: Evidence from Trucking in Aceh", *Journal of Political Economy*, 117(3), 417-452.

#### Additional readings:

Ferraz, Claudio, and Frederico Finan. (2008). "Exposing Corruption politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes", *Quarterly Journal of Economics*, 123(2), 703-745.

Fisman, Raymond and Edward Miguel. (2007). "Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets", *Journal of Political Economy*, 115(6), 1020-1048.

Olken, Ben and Rohini Pande (2012) "Corruption in Developing Countries", *Annual Review of Economics*, Vol. 4.

#### Lecture 13: The political economy of conflict (4/25)

Chassang, Sylvain, and Gerard Padro-i-Miquel. (2010). "Economic Shocks and Civil War", *Quarterly Journal of Political Science*, 4(3), 211-228.

Dell, Melissa, and Pablo Querubin. (2018). "Nation Building through Foreign Intervention: Evidence from Discontinuities in Military Strategies", *Quarterly Journal of Economics*, 133(2), 701-764.

Hsiang, Solomon, Marshall Burke, and Edward Miguel. (2013). "Quantifying the Influence of Climate on Human Conflict", *Science*, 10.1126/science.1235367.

Moscona, Jacob, Nathan Nunn, and James A. Robinson. (2020). "Segmentary Lineage Organization and Conflict in Sub-Saharan Africa", *Econometrica*, 88(5): 1999-2036.

Additional readings:

Bauer, Michal, Chris Blattman, Julie Chytilova, Joe Henrich, Edward Miguel, and Tamar Mitts. (2016). "Can War Foster Cooperation?", *Journal of Economic Perspectives*, 30(3): 249-274.

Blattman, Christopher and Edward Miguel. (2010). "Civil War", *Journal of Economic Literature*, 48(1), 3-57.

#### Lecture 14: Infrastructure and general equilibrium effects (5/2)

Asher, Sam, and Paul Novosad. (2020). "Rural Roads and Local Economic Growth", *American Economic Review*, 119(3): 797-823.

Egger, Dennis, Johannes Haushofer, Edward Miguel, Paul Niehaus, and Michael Walker. (2021). "General Equilibrium Effects of Cash Transfers: Experimental Evidence from Kenya", forthcoming *Econometrica*.

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

#### Additional Readings:

Donaldson, Dave. (2018). "Railroads of the Raj: Estimating the Impact of Transportation Infrastructure", *American Economic Review*, 108(4-5), 899-934.