

**Econ 8774: Economic Development
Fall 2022 Course Syllabus (Preliminary)**

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Office Hours: M/W 2:30-3:30 or by appointment

Class Time and location: M/W 11:15am-12:30pm Econ 5

Class Website: TBD

Course Description

This is a graduate course in development economics. The primary goal of this course is to prepare students for original research within the field of Development Economics. The course readings focus on empirical papers with an emphasis on human capital.

The primary goal of this course is to build skills in reading and writing applied microeconomic papers. Accordingly, I have put less emphasis on giving a thorough overview of the literature and more emphasis on teaching a fewer papers in detail. The focus on human capital will help demonstrate the wide array of topics that can be worked on in one area.

Prerequisites

PH.D. Microeconomic Theory and Econometrics. I'm also assuming you have learnt many of the applied models through classes such as Applied Microeconomics or Labor.

Textbook

There is no required textbook for this course. However, I have put together a list of resources that may have useful supplementary material.

Requirements and Grading

<u>Assignment</u>	<u>Weight</u>
Class participation and summaries	5%
1 Referee Report	10%
Presentation of article	10%
Class presentation 1	5%
Class presentation 2	10%
Research Proposal	20%
Midterm	20%
Final (Second Midterm)	20%

Late Assignments/Missed Exam Policy. The Referee Report and the Research Proposal will be due by 5:00 PM on their due dates. You should email them to me. Following a 5-minute grace period, I will deduct 25 percent from each assignment for each day it is late. Paper summaries must be emailed to me before the beginning of class period in which the paper is discussed will receive no credit.

If you miss the midterm you will receive no credit unless you provide documentation of a medical or family emergency. Your final examine will be reweighted. In the case of a legitimate emergency, a

missed final will be given no weight in the calculation of the final grade and your proposal and midterm will be reweighted accordingly. *There will be no make-up exams.*

Class Participation/Readings:

- **Readings:** Come to class prepared with the assigned article(s) read prior to coming to class. Be prepared to answer questions and participate in the class discussion. Bring a copy of the paper (hard or electronic) we will be discussing that day.
- **Summaries:** Prepare a half page summary of each paper starting with Topic 2 of the course. Hand it in at the beginning of class with your name on it and make a copy for you as well. The date you need to read each paper is in the syllabus, though they are tentative dates depending on how much time we take. Your summary should include the following: the main research question, the model/conceptual framework that guides the analysis, the data used (i.e. unit of analysis), the primary methodology including the identification, and any major limitations that you see in the paper. Part of this grade will come from successfully turning in a summary of each paper. The other portion will come from a review of a random sample of your summaries.
- **Attending a couple of seminars** - TBD

Class Choice Paper: There is one day that you all can choose a paper or topic to read together rather than the topic suggested. Keep an eye on the NBER working papers. I've provided a list of some recent publications you can also choose from. The paper will be selected by voting.

Referee Report: You will write a referee report on one unpublished paper of my choosing. The report should be 3-4 pages double-spaced and should summarize the work, provide a bullet list of issues/suggestions for improvement. I prefer to use working papers, so will assign one when I find an appropriate paper.

Presenting a Paper: You will make one in class presentation on an article from the reading list that has *** in front of it. You can work in groups of 2. The presentation should be 40-50 minutes and should talk about background information you think may be important, why the paper is interesting, methodology. You will also lead a discussion of critiques or suggestions of how things could have been done better, and possible extensions. Please prepare slides as a PDF and email them to me by 4pm the day before your presentation.

Class Presentation: There will be two class presentations, the first is to pitch an idea based on data you have found, and the second is to prepare a research proposal. You don't need to have done any regression analysis, but it needs to be based on data you could realistically obtain. It would be great if the two presentations were on the same topic and provided regression analysis, but you don't have to.

Presentation 1: The point of the first presentation is to pitch a paper idea based on data you have found. In development economics it can be hard to find data sources, so the point of this exercise is to have you find a data sources and pitch an idea for a paper based on these data. You need to lay out your research question(s), data, and the potential methodology you would use to answer the research question based on these data. Then lay out the shortcomings of the methodology. The presentation will be 10-15 minutes. I will give you more instructions on the content of the presentation in class.

Presentation 2: This presentation will be based on your research proposal. This may have come from your "pitch a paper" presentation. More information will be given in class.

Tentative Class Schedule

WEEK OF	MONDAY	WEDNESDAY
1 – Aug 22	Intro. / Assignments /Start Topic 1	1. Impact Evaluation
2 – Aug 29	1. Impact Evaluation	1. Impact Evaluation Review Data Assignment
3 – Sept 5	2a. Social Policy Experiment: CCTs and Short-Term Effects	
4 – Sept 12	2b. Social Policy Experiment: Long	2b. Social Policy Experiment: Long
5 – Sept 19	3a. Human Capital Formation Models – <i>no paper summaries</i>	3b. Early Intervention on Human Capital
6 – Sept 26	3b. Early Intervention on Human Capital	3c. Early Intervention on Adult Outcomes
7 – Oct 3	3c. Early Intervention on Adult Outcomes	3c. Early Intervention on Adult Outcomes
8 – Oct 10	Catch-Up / Assignment Check-ins	MIDTERM
9 – Oct 17	5. Education	6. Fertility
10 – Oct 24	Presentation: Pitch an idea	Presentation: Pitch an idea
11 – Oct 31	Presentation: Pitch an idea	Meetings on Proposal
12 – Nov 7	6a. Migration Selection	6b. Migration Effects
13 – Nov 14	7. Firms	7. Choice Paper – see some options
14 – Nov 21	Thanksgiving Break	
15 – Nov 28	Class Presentations	Class Presentations
16 – Dec 5	Class Presentations	Final Research Proposal Due

Useful Books, Methods Articles, Blogs

Development Textbooks:

Bardhan, Pranab and Christopher Udry. 1999. *Development Microeconomics*. New York: Oxford University Press.

Deaton, Angus. 1997. *The Analysis of Household Surveys: A Microeconometric Approach to Development Policy*. Baltimore, Maryland: The World Bank.

De Janvry, Alain and Elisabeth Sadoulet. 2016. *Development Economics: Theory and Practice*. New York: Routledge.

Ray, Debraj. 1998. *Development Economics*. Princeton, N.J.: Princeton University Press.

H. Chenery, T.N. Srinivasan, J. Behrman, T. Schultz, and J. Strauss, eds. *Handbook of Development Economics*, Vol. 1-4. Published by Elsevier.

You may also want to check out some these more popular press titles: Poor Economics, Why Nations Fail, The Bottom Billion, The End of Poverty, The White Man's Burden, Development as Freedom, Economic Gangsters ...

Helpful Articles on Econometric Methods:

- Abadie and Cattaneo. 2018. "Econometric Methods for Program Evaluation". *Annual Review of Economics*, 10:465-503.
- Angrist, Joshua D. and Alan B. Krueger. 1999. "Empirical Strategies in Labor Economics." *Handbook of Labor Economics*, Vol. 3, Ch. 23, Ed. O. Ashenfelter and D. Card.
- Angrist, Imbens, and Rubin. 1996. "Identification of Causal Effects Using Instrumental Variables," *Journal of the American Statistical Association*. 91(434):444-455.
- Anderson, M. 2008. "Multiple Inference and Gender Difference in the Effects of Early Interventions: A Reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects." *Journal of American Statistical Association* 103(484):1481-1495.
- Athey, S., and G.W. Imbens. 2017. "The Econometrics of Randomized Experiments." Banerjee, A. and E. Duflo, (eds.), *Handbook of Economic Field Experiments*. Volume 1. Elsevier.
- Bertrand, Duflo, Mullainathan. 2004. "How Much Should We Trust Differences-in-Differences Estimates? *The Quarterly Journal of Economics*, 119(1):249-275.
- Deaton, Angus. 1993. "Data and Econometric Tools for Development Analysis." *Handbook of Development Economics*, Vol. 3, Ch. 33, Ed. J. Behrman and T.N. Srinivasan.
- Duflo, Esther, Rachel Glennerster, and Michael Kremer. 2008. "Randomization in Development Economics Research: A Toolkit." *Handbook of Development Economics*, Vol. 4, Ch. 61.
- Gertler, Martine, Premand, Rawlings, Vermeersch. 2011. Impact Evaluation in Practice. The World Bank (https://siteresources.worldbank.org/EXTHDOFFICE/Resources/5485726-1295455628620/Impact_Evaluation_in_Practice.pdf)
- Imbens and Wooldridge. 2009. "Recent Developments in the Econometrics of Program Evaluation." *Journal of Economic Literature*, 47(1): 5-86.
- Lee, David and Thomas Lemieux. 2009. "Regression Discontinuity Designs in Economics," NBER Working Paper 14723.
- Todd, Petra E. 2008. "Evaluating Social Programs with Endogenous Program Placement and Selection of the Treated." *Handbook of Development Economics*, Vol.4, Ch. 60. Pp. 3847-3894.

Blogs:

<http://blogs.worldbank.org/impactevaluations/>
<http://blogs.cgdev.org/globaldevelopment/>
<http://blogs.cgdev.org/globalhealth/>
<http://africacan.worldbank.org/>
<http://psdblog.worldbank.org/psdblog/>
<http://chrisblattman.com/>
<http://marcfbellemare.com/wordpress/>
<http://www.poverty-action.org/blog>

Reading List

Topic 1. Impact Evaluation

A. Randomized Experiments

Duflo, Esther, Rachel Glennerster. 2008. "Chapter 61: Using Randomization in Development Economics Research: A Toolkit." in T. Paul Schutlz and John A. Strauss (eds.), *Handbook of Development Economics*, vol. 4. Amsterdam, The Netherlands: North Holland.
*Section 2, 6, 8

De Janvery, Alain and Elisabeth Sadoulet. 2021. *Development Economics: Theory and Practice*. New York: Routledge
*Chapter 4 including appendices

Deaton, Angus. 2010. "Instruments, Randomization, and Learning about Development," *Journal of Economic Literature*, vol. 48(2): 424-55.
*Focus on Section 4

Take a quick read of article below too – similar to other Deaton but you may prefer it

Deaton, Angus and Nancy Cartwright. 2016. "Understanding and Misunderstanding Randomized Control Trials," *Social Science and Medicine*, 210:2-21.

Supplementary Reading:

Banerjee, Abhijit and Esther Duflo. "The Experimental Approach to Development Economics," *Annual Review of Economics*, Vol. 1: 151-178, September 2009. (also see CEPR working paper No. DP7037, NBER working paper No. 14467).

Duflo, Ester and Micheal Kremer. 2008. "Use of Randomization in the Evaluation of Development Effectiveness" in in George Keith Pitman, Osvaldo N. Feinstein, and Gregory K. Ingram, eds., *Evaluating Development Effectiveness*, Vol. 7 of *World Bank Series on Evaluation and Development*. New Brunswick, New Jersey, and London, U.K.: Transaction Publishers, 2005.

B. Double-Difference (DD) Estimators

There has been a staggering array of new methodological papers in the last few years on DD estimators. We'll probably not get to this or just scratch the surface. You'll cover it in econometrics, but here are some citations. Roth et al. 2022 gives an overview including programs in R and Stata, but is not published.

Athey, Susan, and Guido W. Imbens. "Design-based analysis in difference-in-differences settings with staggered adoption." *Journal of Econometrics* 226.1 (2022): 62-79.

De Chaisemartin, Clément, and Xavier d'Haultfoeuille. "Two-way fixed effects estimators with heterogeneous treatment effects." *American Economic Review* 110.9 (2020): 2964-96.

Roth, Jonathan, Pedro Sant'Anna, Alyssa Bilinski, John Poe, May 30 2022 "What's Trending in Difference-in-differences?" unpublished.
https://jonathandroth.github.io/assets/files/DiD_Review_Paper.pdf

Sun, Liyang, and Sarah Abraham. "Estimating dynamic treatment effects in event studies with heterogeneous treatment effects." *Journal of Econometrics* 225.2 (2021): 175-199.

Topic 2. Social Policy Experiments: Conditional Cash Transfers

A. What are CCTs and Short-Term Effects on Education and Health

Sept 5/Sept 7: Schultz, T. Paul. 2004. "School Subsidies for the Poor: Evaluating the Mexican Progresa Poverty Program", *Journal of Development Economics*, 74(1):199-250. (D-D and fixed-effects regressions)

Sept 7: Barham, Tania. 2011. "A Healthier Start: The Effect of Conditional Cash Transfers on Neonatal and Infant Mortality in Rural Mexico," *Journal of Development Economics*, 94(1), 74-85. (Health- quasi-experimental evidence using national roll out)

Supplemental Reading:

Akresh, Richard, Damien de Walque, and Harounan Kazianga. 2013. "Cash Transfers and Child Schooling: Evidence from a Randomized Evaluation of the Role of Conditionality." World Bank Policy Research Working Paper 6340.

Amarante, Veronica, Marco Manacorda, Edward Miguel, and Andrea Vigorito. 2016. "Do Cash Transfers Improve Birth Outcomes? Evidence from Matched Vital Statistics, Program, and Social Security Data." *American Economic Journal: Economic Policy*, 8(2): 1-43.

Blattman, Christopher, Nathan Fiala, and Sebastian Martinez. 2014. "Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda." *Quarterly Journal of Economics*, 129(2): 697-752.

Gertler, Paul. 2000. "Final Report: The Impact of Progresa on Health" IFPRI Report http://www.ifpri.cgiar.org/sites/default/files/publications/gertler_health.pdf (D-D using randomized experiment and fixed-effects)

Parker, Susan, Luis Rubalcava, Graciela Teruel. 2008. "Chapter62: Evaluating Conditional Schooling and Health Programs" in T. Paul Schutlz and John A. Strauss (eds.), *Handbook of Development Economics* vol. 4. Amsterdam, The Netherlands: North Holland.

Fiszbein, Ariel and Norbert Schady. 2009. *Conditional Cash Transfers: Reducing Present and Future Poverty*. World Bank Policy Research Report, The World Bank, Washington D.C.

Readings on Unconditional Cash Transfers:

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.

Bnhassine, Najy, Florencia Devoto, Esther Duflo, Pascaline Dupas, and Victor Pouliquen. 2015. "Turning a Shove into a Nudge? A 'Labeled Cash Transfer' for Education." *American Economic Journal: Economic Policy*, 7(3): 86-125.

Haushofer, Johannes and Shapiro, Jeremy. 2016. "The Short-Term Impact of Unconditional Cash Transfers to the Poor: Experimental Evidence from Kenya." *Quarterly Journal of Economics*, 131(4): 1973-2042.

Listen to: Planet Money Episode #494: What Happens When You Just Give Money to Poor People

B. Longer-term Effects of CCTs – Learning and Labor Market Outcomes?

Sept 12: Barham, T, K. Macours, J Maluccio. 2022. “Experimental Evidence from a Conditional Cash Transfer Program: Schooling, Learning, Fertility and Labor Market Outcomes After 10 Years” Unpublished (RCT)

*****Sept 14** Parker and Vogl. 2021. “Do Conditional Cash Transfers Improve Economic Outcomes in the Next Generation? Evidence from Mexico,” Unpublished. (Roll Out)

Supplemental Reading:

Behrman, Jere R., Susan W. Parker, and Petra E. Todd. 2009. “Medium-Term Impacts of the Oportunidades Conditional Cash Transfer Program on Rural Youth in Mexico,” in Stephan Klasen and Felicitas Nowak-Lehmann (eds.), *Poverty, Inequality, and Policy in Latin America*. Cambridge: MIT Press (pp. 219–270). (RCT)

Millan, Teresa, Tania Barham, Karen Macours, John A. Maluccio, Macro Stampini. 2019 “Long-Term Impacts of Conditional Cash Transfers: Review of the Evidence,” *World Bank Research Observer*, 34(1): 119-159.

Topic 3. Human Capital Formation: Short, Long-Term and Intergenerational Effects

A. Human Capital Formation Economic and Biological Models

Reading for Sept 19: You do not need to do paper summaries for this day.

Heckman, James. 2007. “The Economics, Technology, and Neuroscience of Human Capital Formation” *Proceedings of the National Academy of Sciences*, 104(33):13250-13255.

Attanasio, Orazio, Costas Meghir, and Emily Nix. 2020. “Human Capital Development and Parental Investment in India, *Review of Economics and Studies*, 87:2511-2541.

- Sections 1-3.

Gluckman, Peter D., Tatjana Buklijas, and Mark A. Hanson. "Chapter 1: The developmental origins of health and disease (DOHaD) concept: past, present, and future." In *The epigenome and developmental origins of health and disease*. Academic Press, 2016. 1-15.

- This is a chapter in a book that goes into many more details that you may like to read if you get into this literature. Be ready to get out your medical dictionary!

Supplemental Reading:

Cunha, Flavio and James Heckman. 2007. “The Technology of Skill Formation,” AEA Papers and Proceedings, 97(2):31-47. – This is similar to Heckman 2007

Cunha, F., J. Heckman and S.M. Schennach. 2010. “Estimating the Technology of Cognitive and Noncognitive Skill Formation.” *Econometrica* 78(3): 883–931.

Barker, D. J. P., ed. 1992. *Fetal and Infant Origins of Adult Disease*. London: British Medical Journal.

Almond, Douglas and Currie, Janet. 2011. “Killing Me Softly: The Fetal Origins Hypothesis” *Journal of Economic Perspectives*, 25(3): 153-172.

B. Effect of Early Childhood Intervention on Human Capital

*****Sept 21:** Miguel, Edward and Michael Kremer. 2004. "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities", *Econometrica*, 72(1), 159-217. (RCT)

Sept 21/Sept 26: Early Childhood Health and Family Planning: Long-Term and Intergenerational Effects on Human Capital. Unpublished (Quasi-random experiment)

Sept 26: Field, Erica, Omar Robles and Maximo Torero. 2009. "Iodine Deficiency and Schooling Attainment in Tanzania" *American Economic Journal: Applied Economics* 1(4): 140-169. (May not have time for this but would like you to read it)

Supplemental Reading:

Barham, Tania. 2012. "Enhancing Cognitive Functioning: Medium-Term Effects of Health and Family Planning Program in Matlab," *American Economic Journal: Applied Economics*, 4(1), 245-73.

Bharadwaj, Prashant, Katrine Velleksen Løken, and Christopher Neilson. 2013. "Early Life Health Interventions and Academic Achievement." *American Economic Review*, 103(5): 1862-91.

Jayachandran, Seema, Adriana Lleras-Muney. 2009. Life Expectancy and Human Capital Investments: Evidence from Maternal Mortality Declines *Quarterly Journal of Economics*, 124 (1): 349-397.

Lucas, Adrienne M. 2010, "Malaria Eradication and Educational Attainment: Evidence from Paraguay and Sri Lanka," *American Economic Journal: Applied Economics*, 2(2): 46-71.

Maluccio, John, et al. 2009. "The Impact of Improving Nutrition during Early Childhood on Education among Guatemalan Adults". *Economic Journal* 119(537): 734-763.

C. Effect of Early Childhood Intervention on Labor Market Outcomes

*****Sept 28:** Bleakley, Hoyt. 2010. "Malaria Eradication in the Americas: A Retrospective Analysis of Childhood Exposure." *American Economic Journal: Applied Economics*, 2(2): 1-45. (Spatial variation)

Oct 3: Baird, S, J. Hicks, M. Kremer, E Miguel. 2016. Worms at Work: Long-Run of a Child Health Investment. *Quarterly Journal of Economics*, 131(4):1637-1680. (RCT)

Oct 3: Barham, T, Kuhn, R and P. Turner. 2018. "No Place Like Home: Long-Run Impacts of Early Child Health and Family Planning" mimeo. (Quasi-random experiment)

Supplementary Reading:

Acemoglu, Daran and Simon Johnson, 2007. "Disease and Development: The Effect of Life Expectancy on Economic Growth." *Journal of Political Economy*, 115(6): 925-985. (Macro paper)

Almond, Almond, D., J. Currie, and V. Duque, "Childhood Circumstance and Adult Outcomes: Act II," *Journal of Economic Literature*, 2018, 56(4), 1360–1446.

Cutler, D., Fung, W., Kremer, M., Singhal, M., Vogl, T. 2010, "Early-life Malaria Exposure and Adult Outcomes: Evidence from Malaria Eradication in India," *American Economic Journal: Applied Economics*, 2(2): 72-94.

Gertler, P., J. Heckman, R. Pinto, A. Zanolini, C. Vermeersch, S. Walker, S. Chang, and S. Grantham-McGregor, "Labor Market Returns to an Early Childhood Stimulation Intervention in Jamaica," *Science*, 2014, 344 (6187), 998-1001.

- Hoddinott, J., J.A. Maluccio, J.R. Behrman, R. Flores, and R. Martorell. 2008. "Effect of a Nutrition Intervention During Early Childhood on Economic Productivity in Guatemalan Adults," *The Lancet*. 371(9610): 411–416.
- Strauss, J., and Thomas, D., "Health over the Life Course" (pp. 3375– 3465), in T. Paul Schultz and John Strauss (eds.), *Handbook of Development Economics* (Elsevier, 2008).

D. Demand for Testing

- Oct. 5:** Thornton, Rebecca. 2008. "The Demand for, and Impact of, Learning HIV Status." *American Economic Review*, 98(5): 1829–1863. (RCT)

Supplemental Readings:

- Dupas, Pascaline. 2011. "Do Teenagers Respond to HIV Risk Information? Evidence from a Field Experiment in Kenya." *American Economic Journal: Applied Economics*, 3(1): 1-34.
- Gong, Eric. 2014 "HIV Testing and Risky Sexual Behavior" *The Economic Journal*, 125(582):32-60.
- Evans, D., and E. Miguel. 2007. Orphans and Schooling in Africa: A Longitudinal Analysis," *Demography*, 44(1): 35-57.
- Kremer, Michael. 2002. "Pharmaceuticals and the Developing World," *Journal of Economic Perspectives*, 16(4): 67-90.

Topic 4. Education

- *****Oct. 17:** Lucas, A and I. Mbiti. 2014. "Effects of School Quality on Student achievement: Discontinuity Evidence from Kenya," *American Economic Journal: Applied Economics*, 6(3): 234-263. (Regression Discontinuity)

Supplementary Reading:

- Angrist, Joshua D. and Victor Lavy. 1999. "Using Maimonides' Rule to Estimate the Effect of Class Size on Scholastic Achievement." *The Quarterly Journal of Economics*, 114(2): 533-575.
- 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.
- Banerjee, Abhijit and Esther Duflo. 2006. "Addressing Absence." *Journal of Economic Perspectives*, 20(1): 117–132.
- Card, David. 1999. "The Causal Effect of Education on Earnings." *Handbook of Labor Economics*, Vol. 3, Ch. 30.
- Duflo, Esther. 2001. "Schooling and Labor Market Consequences for School Construction in Indonesia: Evidence from an Unusual Policy Experiment." *The American Economic Review*, 91(4):795-813
- Duflo, Esther, Rema Hanna and Stephen Ryan. 2007. "Monitoring Works: Getting Teachers to Come to School." BREAD Working Paper No. 103.
- Glewwe, Paul and Michael Kremer. 2006. "Schools, Teachers, and Education Outcomes in Developing Countries." *Handbook of the Economics of Education*, Vol. 2, Ch.16.
- Jensen, Robert. 2010. "The (Perceived) Returns to Education and the Demand for Schooling". *Quarterly Journal of Economics* 125(2): 515-548. (Returns to Education)
- Kremer, Michael. 2003. "Randomized Evaluations of Educational Programs in Developing Countries: Some Lessons." *The American Economic Review*, Papers and Proceedings of the One Hundred Fifteenth Annual Meeting of the American Economic Association, Washington, DC, January 3-5, 2003, 93(2): 102-106.
- Kremer, Michael, Rebecca Thornton, and Edward Miguel. 2009. "Incentives to Learn." *Review of Economics and Statistics*, 91(3): 437-56.
- Rosenzweig, Mark R. 2010. "Microeconomic Approaches to Development: Schooling, Learning, and Growth." *Journal of Economic Perspectives*, 24(3): 81-96.

Topic 5. Fertility

***Oct. 19: Angrist, Joshua, Victor Lavy, Analia Schlosser, 2010. "Multiple Experiments for the Causal Link between the Quantity and Quality of Children," *Journal of Labor Economics*, 28(4): 773-824.

Supplemental Readings:

- Ashraf, Nava, Erica Field, and Jean N. Lee (2014), "Household Bargaining and Excess Fertility: An Experimental Study in Zambia", *American Economic Review* 104(7).
- Black, Sandra E., Paul J. Devereux and Kjell G. Salvanes. (2005) "The More The Merrier? The Effect Of Family Size And Birth Order On Children's Education," *Quarterly Journal of Economics*, Vol. 120 (2), 669-700.
- Cáceres-Delpiano, Julio and Marianne Simonsen, 2012. "The Toll of Fertility on Mothers' Well-being," *Journal of Health Economics*, vol. 31(5), 752-766.
- Cáceres-Delpiano, Julio, 2006. "The Impacts of Family Size on Investment in Child Quality," *Journal of Human Resources*, vol. 41(4).
- Duflo, E, Dupas, P and Kremer, M. (2015). "Education, HIV, and Early Fertility: Experimental Evidence from Kenya", *American Economic Review*, Vol. 105(9), 2257-97.
- Edlund, L., Li, H., Yi, J., & Zhang, J. (2013). Sex Ratios and Crime: Evidence from China. *Review of Economics and Statistics*, 95(5), 1520-1534.
- Jayachandran, Seema and Adriana Lleras-Muney (2009), "Life Expectancy and Human Capital Investments: Evidence from Maternal Mortality Declines", *Quarterly Journal of Economics*, February 2009, vol 124 (1), 349-397.
- Mogstad, M. and Wiswall, M. (2016), "Testing the quantity-quality model of fertility: Estimation using unrestricted family size models". *Quantitative Economics*, 7: 157-192.
- Rosenzweig, M., & Wolpin, K. (1980). "Testing the Quantity-Quality Fertility Model: The Use of Twins as a Natural Experiment." *Econometrica*, 48(1), 227-240.

Topic 6. Migration

A. Migration Selection

Nov 7: Gibson, J., McKenzie, D., Stillman, S. 2010. "How Important Is Selection? Experimental vs. Non-Experimental Measures of the Income Gains from Migration," *Journal of the European Economic Association*, 8(4): 913-45.

Supplementary Readings:

- Borjas, George, 1987. "Self-Selection and the Earnings of Immigrants," *American Economic Review*, 77(4), 531-53.
- Covarrubias, Matias, Jeanne Lafortune and Jose Tessada (2015), "Who comes and Why? Determinants of Immigrants Skill Level in early XXth century US", *Journal of Demographic Economics*, Vol. 81 (1), 115-155.
- Leah Boustan, Ran Abramitzky and Katherine Eriksson (2013), "Europe's Tired, Poor, Huddled Masses: Self-Selection and Economic Outcomes in the Age of Mass Migration," *American Economic Review*.
- McKenzie, David, Caroline Theoharides, and Dean Yang. (2014). "Distortions in the International Migrant Labor Market: Evidence from Filipino Migration and Wage Responses to Destination Country Economic Shocks." *American Economic Journal: Applied Economics*, Vol. 6 (2): 49-75.
- Rosenzweig, Mark, 2006. "Global Wage Differences and International Student Flows," Brookings Trade.

B. Effects of Migration

Nov. 9: Yang, Dean. 2008. "International Migration, Remittances, and Household Investment: Evidence from Philippine Migrants' Exchange Rate Shocks," *Economic Journal*, 118 (528): 591-630. (IV)

Supplementary Reading:

- Bryan, G. Chowdhury, S. Mobarak, A.M. 2014. "Under-investment in a Profitable Technology: The Case of Seasonal Migration in Bangladesh", *Econometrica*, 82, 1671–1748.
- Gonzalez-Velosa, Carolina (2012), "The Effects of Emigration and Remittances on Agriculture: Evidence from the Philippines", unpublished mimeo.
- Hanson, Gordon H. (2007), "Emigration, Labor Supply, and Earnings in Mexico," in *Mexican Immigration to the United States* (2007), George J. Borjas, editor, p. 289 – 328.
- McKenzie, David, J. Gibson and S. Stillman (2011), "The Impacts of International Migration on Remaining Household Members: Omnibus Results from a Migration Lottery Program," *Review of Economics and Statistics*, 93(4): 1297-1317, 2011.
- Mishra, Prachi (2007), "Emigration and Wages in Source Countries: Evidence from Mexico", *Journal of Development Economics*, no. 82, pp. 180-199.
- Munshi and Rosenzweig. 2015. Networks and Misallocation: Insurance, Migration and the Rural-Urban Wage Gap.

Topic 7: Labor Firms

*** **Nov. 14:** Hardy, Morgan and Jamie McCasland. 2022 "Are Small Firms Labor Constrained? Experimental Evidence from Ghana. Forthcoming *American Economic Journal Applied*.

Supplemental Readings:

- Banerjee, Abhijit and Esther Duflu. 2000. "Reputation Effects and the Limits of Contracting: A Study of the Indian Software Industry," *Quarterly Journal of Economics* 115(3): 989-1017.
- Macchiavelli, Rocco, and Ameet Morjaria. 2021. "Competition and Relational Contracts in the Rwanda Coffee Chain." *The Quarterly Journal of Economics*, 136(2):1098-1143.
- McMillan John and Christopher Woodruff. 1999. "Interfirm Relationships and Informal Credit in Vietnam," *Quarterly Journal of Economics*, 114(4): 1285-1320.

Topic 8. Choice Papers

*** **Nov. 16 – choose from below or suggest a paper**

- Atkin, David, Azam Chaudhry, Shamyla Chaudry, Amit K. Khandelwal, Eric Verhoogen. 2017. "Organizational Barriers to Technology Adoption: Evidence from Soccer-Ball Producers in Pakistan", *The Quarterly Journal of Economics*, 132(3):1101-1164 (RCT).
- Blattman, Christopher, Gustavo Duncan, Benjamin Lessing, & Santiago Tobon. June 2022. "Gang Rule: Understanding and Countering Criminal Governance," Unpublished.
- Colmer, Johnathan. 2021. "Temperature, Labor Reallocation, And Industrial Production: Evidence India," *American Economic Journal Applied*, 13(4):101-24.
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University Policies

Classroom Behavior

Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. For more information, see the [classroom behavior](#) policy, the [Student Code of Conduct](#), and the [Office of Institutional Equity and Compliance](#).

Requirements For Covid-19

As a matter of public health and safety, all members of the CU Boulder community and all visitors to campus must follow university, department and building requirements and all public health orders in place to reduce the risk of spreading infectious disease. CU Boulder currently requires COVID-19 vaccination and boosters for all faculty, staff and students. Students, faculty and staff must upload proof of vaccination and boosters or file for an exemption based on medical, ethical or moral grounds through the MyCUHealth portal.

The CU Boulder campus is currently mask-optional. However, if public health conditions change and masks are again required in classrooms, students who fail to adhere to masking requirements will be asked to leave class, and students who do not leave class when asked or who refuse to comply with these requirements will be referred to Student Conduct and Conflict Resolution. For more information, see the policy on classroom behavior and the Student Code of Conduct. If you require accommodation because a disability prevents you from fulfilling these safety measures, please follow the steps in the “Accommodation for Disabilities” statement on this syllabus.

If you feel ill and think you might have COVID-19, if you have tested positive for COVID-19, or if you are unvaccinated or partially vaccinated and have been in close contact with someone who has COVID-19, you should stay home and follow the further guidance of the Public Health Office (contacttracing@colorado.edu). If you are fully vaccinated and have been in close contact with someone who has COVID-19, you do not need to stay home; rather, you should self-monitor for symptoms and follow the further guidance of the Public Health Office (contacttracing@colorado.edu).

Accommodations For Disabilities

If you qualify for accommodations because of a disability, please email me your accommodation letter from Disability Services by **Sept. 20th** that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the [Disability Services website](#). Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition, see [Temporary Medical Conditions](#) on the Disability Services website.

PREFERRED STUDENT NAMES AND PRONOUNS

CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

Honor Code

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the [Honor Code](#). Violations of the Honor Code may include, but are not limited to: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution (honor@colorado.edu); 303-492-5550). Students found responsible for violating the [Honor Code](#) will be assigned resolution outcomes from the Student Conduct & Conflict Resolution as well as be subject to academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found on the [Honor Code website](#).

Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation

CU Boulder is committed to fostering an inclusive and welcoming learning, working, and living environment. University policy prohibits sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, protected-class discrimination and harassment, and related retaliation by or against members of our community on- and off-campus. These behaviors harm individuals and our community. The Office of Institutional Equity and Compliance (OIEC) addresses these policies, and individuals who believe they have been subjected to misconduct can contact OIEC at 303-492-2127 or email cureport@colorado.edu. Information about university policies, [reporting options](#), and support resources can be found on the [OIEC website](#). Please know that faculty and graduate instructors have a responsibility to inform OIEC when they are made aware of any issues related to these policies regardless of when or where they occurred to ensure that individuals impacted receive information about their rights, support resources, and resolution options. To learn more about reporting and support options for a variety of concerns, visit [Don't Ignore It](#).

Religious Holidays

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance.

See the [campus policy regarding religious observances](#) for full details.