# SOSC 5440: Economics of Development Division of Social Science, HKUST Spring 2023/2024

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Office: Academic Building, Room 2378

Office Hours: Tuesday 3-4pm

Lecture: Wednesday 9:00-11:50am at Room 5566

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Office: Academic Building, Room 3001

Office Hours: Tuesday 2-3pm

## Course Description

This course covers the microeconomics of development, focusing on empirical applications. Topics include health, education, gender inequality, behavior, firms, agriculture, environment, and institions. Lectures will concentrate on the rigorous application of empirical methods to examine important questions in development economics. Students will complete empirical exercises and present recent journal articles.

## **Course Materials**

Textbooks: There is no required textbook for this course. However, you may consider the following as useful references:

- Abhijit Banerjee and Esther Duflo, *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*, New York, NY, USA: PublicAffairs, 2011.
- Joshua Angrist and Jörn-Steffen Pischke, Mostly Harmless Econometrics, Princeton University Press, 2009.

In addition, there will be a reading list comprising of peer-reviewed papers in the literature. Students will be expected to have read the assigned papers prior to lectures. Most readings are available in electronic form on our course website in Canvas.

## Course Learning Outcomes

- 1. Establish critical understanding of the development economics literature
- 2. Comprehand major empirical methodologies in development economics
- 3. Integrate academic research with real-world issues and applications
- 4. Effectively communicate research findings

## Assessment Tasks/Evaluation Plan

Assessment will be determined by the following formula:

	Percent of Final Grade
Class participation	5%
Referee report	15%
Paper presentation	20%
Data analysis	20%
Research proposal	40%

- Class attendance and participation: Class attendance is mandatory. You are responsible for all materials presented in lecture. Class participation (e.g., asking questions or answering questions) is also highly recommended.
- Referee report: A referee report should be 2-4 pages long, double spaced. A list of papers for the referee report will be circulated in class during the course of the semester. Some helpful guides on how to write a referee report are available here: https://www.aeaweb.org/articles?id=10.1257/jep.31.1.231. Referee report should be submitted through the course website on the due date (TBD) until 5pm. Late submissions will not be accepted. This is an individual assignment. Students should submit their own work.
- Paper presentation: In-class presentation and discussion of an assigned paper for approximately 30 minutes. You are to work in groups (group size determined based on class size). Presentations will be scheduled throughout the semester.
- Data analysis: There will be 3 take-home data analysis assignments in which you will be asked to conduct empirical analysis (i.e., replicating study results) using Stata or R. This is an individual assignment. Students should submit their own work.
- Research proposal: You have to develop an original research proposal that examines a real-world question related to topics in development economics. You are to work in groups (group size determined based on class size). You will submit an interim report by March 27th (5% of total grade), present your proposal in class on May 8th (15%) and submit a final manuscript during the final exam period (date TBD).

### **Academic Conduct**

The University regulations on academic dishonesty will be strictly enforced. Also, please check the University Statement on academic integrity at https://registry.hkust.edu.hk/resource-library/academic-integrity.

#### Other Policies

Please be considerate in class. This means turning off your cell phones (and all other potentially noisy devices) or set it to "silent mode", limiting conversation to a minimum, and, if necessary, entering/leaving the classroom as quietly as possible. Not doing so creates a <u>negative externality</u> for your fellow students and will not be tolerated.

# Course Schedule (tentative and subject to change)

Week	Date	Topic
1	January 31	Introduction & Causal Model
2	February 7	Income, Nutrition, and Health
3	February 14	Investment in Human Capital
4	February 21	Education Quality
5	February 28	Gender Inequality
6	March 6	Behavioral Economics
7	March 13	Firms and Productivity
8	March 20	Agriculture and Technology Adoption
9	March 27	Environment and Development
10	April 3	No class (labor day)
11	April 10	Corruption
12	April 17	Institution
13	April 24	Conflict
14	May 8	Research Proposal Presentation

# Reading List<sup>1</sup>

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## Topic 1: Introduction and Causal Model

Duflo, E., Glennerster, R., and Kremer, M. (2007). Using randomization in development economics research: A toolkit. *Handbook of Development Economics*, 4:3895–3962

Angrist, J. D. and Pischke, J.-S. (2009). Mostly harmless econometrics: An empiricist's companion. Princeton university press

## Topic 2: Income, Nutrition, and Health

Hidrobo, M., Hoddinott, J., Peterman, A., Margolies, A., and Moreira, V. (2014). Cash, food, or vouchers? Evidence from a randomized experiment in northern Ecuador. *Journal of Development Economics*, 107:144–156

Haushofer, J. and Shapiro, J. (2016). The short-term impact of unconditional cash transfers to the poor: experimental evidence from Kenya. *The Quarterly Journal of Economics*, 131(4):1973–2042

Troller-Renfree, S. V., Costanzo, M. A., Duncan, G. J., Magnuson, K., Gennetian, L. A., Yoshikawa, H., Halpern-Meekin, S., Fox, N. A., and Noble, K. G. (2022). The impact of a poverty reduction intervention on infant brain activity. *Proceedings of the National Academy of Sciences*, 119(5):e2115649119

Miguel, E. and Kremer, M. (2004). Worms: identifying impacts on education and health in the presence of treatment externalities. *Econometrica*, 72(1):159–217

#### Topic 3: Investment in Human Capital

Duflo, E. (2001). Schooling and labor market consequences of school construction in Indonesia: Evidence from an unusual policy experiment. *American Economic Review*, 91(4):795–813

Dizon-Ross, R. (2019). Parents' beliefs about their children's academic ability: Implications for educational investments. *American Economic Review*, 109(8):2728–2765

Jayachandran, S. and Lleras-Muney, A. (2009). Life expectancy and human capital investments: Evidence from maternal mortality declines. *The Quarterly Journal of Economics*, 124(1):349–397

\*Student presentation: Behrman, J. R., Fan, C. S., Guo, N., Wei, X., Zhang, H., and Zhang, J. (2022). Tutoring efficacy, household substitution, and student achievement: Experimental evidence from an after-school tutoring program in rural china. *International Economic Review* 

## Topic 4: Education Quality

Duflo, E., Dupas, P., and Kremer, M. (2011a). Peer effects, teacher incentives, and the impact of tracking: Evidence from a randomized evaluation in Kenya. *American Economic Review*, 101(5):1739–1774

<sup>&</sup>lt;sup>1</sup>Tentative and subject to change. Further announcements on readings will be made in class.

Hanna, R. N. and Linden, L. L. (2012). Discrimination in grading. *American Economic Journal: Economic Policy*, 4(4):146–168

Pradhan, M., Suryadarma, D., Beatty, A., Wong, M., Gaduh, A., Alisjahbana, A., and Artha, R. P. (2014). Improving educational quality through enhancing community participation: Results from a randomized field experiment in Indonesia. *American Economic Journal: Applied Economics*, 6(2):105–126

Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K., and Rogers, F. H. (2006). Missing in action: teacher and health worker absence in developing countries. *Journal of Economic Perspectives*, 20(1):91–116

\*Student presentation: Chen, Y., Fan, Z., Gu, X., and Zhou, L. (2020b). Arrival of young talent: The send-down movement and rural education in china. *American Economic Review*, 110(11):3393-3430

## Topic 5: Gender Inequality

Jayachandran, S. (2015). The roots of gender inequality in developing countries. *Annual Review of Economics*, 7(1):63–88

Beaman, L., Duflo, E., Pande, R., and Topalova, P. (2012). Female leadership raises aspirations and educational attainment for girls: A policy experiment in India. *Science*, 335(6068):582–586

Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic literature*, 50(4):1051–1079

Ashraf, N., Bau, N., Nunn, N., and Voena, A. (2020). Bride price and female education. *Journal of Political Economy*, 128(2):591–641

Qian, N. (2008). Missing women and the price of tea in China: The effect of sex-specific earnings on sex imbalance. The Quarterly Journal of Economics, 123(3):1251–1285

Izumi, Y., Park, S., and Yang, H. (2023). The effects of South Korean Protestantism on human capital and female empowerment, 1930–2010. *Journal of Comparative Economics*, 51(2):422–438

\*Student presentation: Guo, R. and Zhang, J. (2020). The effects of children's gender composition on filial piety and old-age support. *The Economic Journal*, 130(632):2497–2525

#### Topic 6: Behavioral Economics

Kremer, M., Rao, G., and Schilbach, F. (2019). Behavioral development economics. In *Handbook of Behavioral Economics: Applications and Foundations 1*, volume 2, pages 345–458. Elsevier Hanna, R., Mullainathan, S., and Schwartzstein, J. (2014). Learning Through Noticing. *Quarterly Journal of Economics*, 129(3):1311–1354

Duflo, E., Kremer, M., and Robinson, J. (2011b). Nudging farmers to use fertilizer: Theory and experiment evidence from Kenya. *American Economic Review*, 101(6):2350–2390

Mani, A., Mullainathan, S., Shafir, E., and Zhao, J. (2013). Poverty impedes cognitive function. *Science*, 341(6149):976–980

\*Student presentation: Cantoni, D., Yang, D. Y., Yuchtman, N., and Zhang, Y. J. (2019). Protests as strategic games: experimental evidence from Hong Kong's antiauthoritarian movement.

The Quarterly Journal of Economics, 134(2):1021–1077

## Topic 7: Firms and Productivity

- Bloom, N., Eifert, B., Mahajan, A., McKenzie, D., and Roberts, J. (2013). Does management matter? Evidence from India. *The Quarterly journal of economics*, 128(1):1–51
- Atkin, D., Khandelwal, A. K., and Osman, A. (2017). Exporting and Firm Performance: Evidence from a Randomized Experiment. *Quarterly Journal of Economoics*, 132(2):551–615
- Kremer, M. (1993). The O-ring theory of economic development. The Quarterly Journal of Economics, 108(3):551–575
- Bloom, N. and Van Reenen, J. (2010). Why do management practices differ across firms and countries? *Journal of Economic Perspectives*, 24(1):203–224
- \*Student presentation: Jia, R., Lan, X., and i Miquel, G. P. (2021). Doing business in China: Parental background and government intervention determine who owns business. *Journal of Development Economics*, 151:102670

# Topic 8: Agriculture and Technology Adoption

- Magruder, J. R. (2018). An assessment of experimental evidence on agricultural technology adoption in developing countries. *Annual Review of Resource Economics*, 10:299–316
- Cai, J. (2016). The impact of insurance provision on household production and financial decisions. *American Economic Journal: Economic Policy*, 8(2):44–88
- Bold, T., Ghisolfi, S., Nsonzi, F., and Svensson, J. (2022). Market access and quality upgrading: Evidence from three field experiments. *American Economic Review*, page Forthcoming
- Bold, T., Kaizzi, K. C., Svensson, J., and Yanagizawa-Drott, D. (2017). Lemon technologies and adoption: measurement, theory and evidence from agricultural markets in uganda. *The Quarterly Journal of Economics*, 132(3):1055–1100
- Park, S., Yuan, Z., and Zhang, H. (2023). Technology Training, Buyer-Supplier Relationship, and Quality Upgrading in an Agricultural Supply Chain. *The Review of Economics and Statistics*, pages 1–46
- \*Student presentation: Bai, J., Gazze, L., and Wang, Y. (2022). Collective reputation in trade: Evidence from the chinese dairy industry. *Review of Economics and Statistics*, 104(6):1121–1137

#### Topic 9: Environment

- Dell, M., Jones, B. F., and Olken, B. A. (2012). Temperature shocks and economic growth: Evidence from the last half century. *American Economic Journal: Macroeconomics*, 4(3):66–95
- Jayachandran, S., De Laat, J., Lambin, E. F., Stanton, C. Y., Audy, R., and Thomas, N. E. (2017). Cash for carbon: A randomized trial of payments for ecosystem services to reduce deforestation. *Science*, 357(6348):267–273
- Ebenstein, A., Fan, M., Greenstone, M., He, G., and Zhou, M. (2017). New evidence on the impact of sustained exposure to air pollution on life expectancy from China's Huai River Policy.

Proceedings of the National Academy of Sciences, 114(39):10384–10389

Jayachandran, S. (2022). How economic development influences the environment. *Annual Review of Economics*, 14:229–252

Burgess, R., Costa, F., and Olken, B. A. (2019). The Brazilian Amazon's double reversal of fortune. Working Paper

Burgess, R., Hansen, M., Olken, B. A., Potapov, P., and Sieber, S. (2012). The political economy of deforestation in the tropics. *The Quarterly Journal of Economics*, 127(4):1707–1754

Balboni, C., Burgess, R., Heil, A., Old, J., and Olken, B. A. (2021). Cycles of fire? politics and forest burning in Indonesia. In *AEA Papers and Proceedings*, volume 111, pages 415–419

\*Student presentation: He, G., Wang, S., and Zhang, B. (2020). Watering down environmental regulation in China. The Quarterly Journal of Economics, 135(4):2135–2185

## Topic 10: Corruption

Olken, B. A. (2007). Monitoring corruption: evidence from a field experiment in Indonesia. Journal of political Economy, 115(2):200–249

Olken, B. A. and Barron, P. (2009). The simple economics of extortion: evidence from trucking in Aceh. *Journal of Political Economy*, 117(3):417–452

Bertrand, M., Djankov, S., Hanna, R., and Mullainathan, S. (2007). Obtaining a driver's license in India: an experimental approach to studying corruption. *The Quarterly Journal of Economics*, 122(4):1639–1676

Bai, J., Jayachandran, S., Malesky, E. J., and Olken, B. A. (2019). Firm growth and corruption: Empirical evidence from Vietnam. *The Economic Journal*, 129(618):651–677

Oliva, P. (2015). Environmental regulations and corruption: Automobile emissions in Mexico City. *Journal of Political Economy*, 123(3):686–724

\*Student presentation: Chen, T. and Kung, J. (2019). Busting the "Princelings": The campaign against corruption in China's primary land market. *The Quarterly Journal of Economics*, 134(1):185–226

## Topic 11: Institutions

Acemoglu, D., Johnson, S., and Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review*, 91(5):1369–1401

Hodler, R. and Raschky, P. A. (2014). Regional favoritism. *The Quarterly Journal of Economics*, 129(2):995–1033

Jones, B. F. and Olken, B. A. (2005). Do leaders matter? national leadership and growth since world war II. *The Quarterly Journal of Economics*, 120(3):835–864

Nunn, N. (2008). The long-term effects of Africa's slave trades. The Quarterly Journal of Economics, 123(1):139–176

Dell, M. (2010). The persistent effects of Peru's mining mita. *Econometrica*, 78(6):1863–1903 Dell, M. and Olken, B. A. (2020). The development effects of the extractive colonial economy: The Dutch cultivation system in Java. *The Review of Economic Studies*, 87(1):164–203

\*Student presentation: Chen, T., Kung, J., and Ma, C. (2020a). Long live Keju! The persistent effects of China's civil examination system. *The Economic Journal*, 130(631):2030–2064

## Topic 12: Conflict

Blattman, C. and Annan, J. (2010). The consequences of child soldiering. The Review of Economics and Statistics, 92(4):882–898

Nunn, N. and Qian, N. (2014). US food aid and civil conflict. American Economic Review, 104(6):1630–1666

Kim, J., Kim, K., Park, S., and Sun, C. (2023). The economic costs of trade sanctions: Evidence from North Korea. *Journal of International Economics*, 145:103813

\*Student presentation: Campante, F. R., Chor, D., and Li, B. (2023). The political economy consequences of China's export slowdown. *Journal of the European Economic Association*, page jvad007