

SYLLABUS

“(…) A study of least developed countries is to economics what the study of pathology is to medicine: by understanding what happens when things do not work well, we gain insight into how they work when they do function as designed. The difference is that in economics, pathology is the rule: less than a quarter of mankind lives in the developed economies.” – Joseph E. Stiglitz.

Course Overview

This is a course is about the microeconomics of development. We will thus use the toolkit of applied microeconomics to study the behavior of individuals, households, and firms in developing countries.

You are expected to have a good understanding of the basic principles of microeconomics (i.e., PPS128 or higher): utility maximization; profit maximization; risk and uncertainty; public goods and externalities; market power; principal-agent model; etc. Moreover, because the material relies heavily on empirical findings, you should have a good, intuitive grasp of basic applied statistics: linear regression, hypothesis testing, etc.

Although we will be going over some theoretical models because they provide a useful framework through which one can analyze the world, the content of the course will largely be empirical. In other words, we will be focusing on what we can and cannot learn, as well as on what we have learned from taking these models to the data. We will also be focusing on the policy implications one can derive from empirical findings.

Because this course is a bit mathematical in nature, I will be spending a great deal of time walking you through the models in order for you to gain an intuitive understanding of them. I will never ask you to solve theoretical models or estimate empirical models, but I do expect you to understand their key features and be able to express them in words. To counterbalance the technical aspects of the course, I will have you read studies dealing with specific policies and discuss them at the end of each section of the syllabus, and I provide a set of lighter readings and podcasts to help illustrate the material.

Course Information

Time: T-Th 11:40-12:55 in Rubenstein 149

Instructor: Marc F. Bellemare

Office: Rubenstein 110

Email: marc.bellemare@duke.edu

Course Website: <http://marcfbellemare.com/wordpress/pps232/>

I will email you the password required to access the course website.

Office Hours: Monday all day, by appointment. Please schedule office hour visits at least 24 hours ahead of time, for at most 30 minutes. If we cannot find a time that suits us both on Monday, I will be happy to schedule office hours at some other time.

Textbook

There is no textbook for this course, but you should buy the following book, which was written to explain many of the more technical concepts we will discuss in class and emphasize their policy importance to the general public:

Banerjee, A.V., and E. Duflo (2011), *Poor Economics*, New York: PublicAffairs,

which will hereafter be referred to simply as Banerjee and Duflo (2011).

You are expected to take notes in class. To help you do so, I will post my slides on Blackboard, typically in the hours before lecture, as I tend to work on my slides up until the last minute. I will be putting the compulsory readings on my website as well, on a password-protected page. Email me for the password.

Assignments and Grading

1. *Participation in Discussions*: In each module, I assign case studies or empirical papers to be discussed in class, usually on Thursday. You are expected to read the papers and be familiar with their main points so as to be able to discuss them with your colleagues and use their results to inform policy recommendations. Please bring the assigned reading to the Thursday lecture so you can refer to them during discussion. This is your time to interact with the material, and the quality of the discussion is only as good as the quality of your preparation and of your interventions. (10%)
2. *First Midterm Examination*: An in-class, open-book exam on Thursday, October 6 on the material covered up to and including the October 4 lecture. (20%)
3. *Second Midterm Examination*: An in-class, open-book exam on Thursday, December 1 on the material covered throughout the semester. (30%)
4. *Homework*: One problem set and two policy memos with questions similar to the ones on the exams (10%). Problem Set #1 is due on September 15. Policy Memo #1 is due on October 13. Policy Memo #2 is due November 17.
5. *Research Paper*: For this assignment, you will have to analyze a specific phenomenon in a specific developing country with the aim of identifying the main issues and formulating policy recommendations. A specific set of guidelines regarding this assignment will be distributed early in the semester. This assignment will be due electronically on Sunday, December 11 at 5PM. (30%)

Grading Policy: The Sanford School's target mean for 200-level course grades is 3.4, i.e., a little over B+. I tend not to stray from that guideline.

Should you disagree with me over a grade, please notify me within one week of receiving the grade by submitting a written explanation of why you think you deserve a (presumably) higher grade. I will then carefully re-grade your assignment in its entirety. If you do not follow this procedure, do not be surprised if I am unwilling to discuss grades: I am using this paper trail system in order to prevent problems down the road both for myself and for you.

I will be looking at trends. If you perform poorly on the first midterm but perform really well on the second midterm and on your term paper, I will adjust your grade accordingly.

Finally, note that I will not tolerate frivolous requests for regrades, or grade grubbing. There needs to be a (nondegenerate) grade distribution in every class, if only to set up the proper incentives for you to learn the material. This unfortunately means that grades may span the full grading scale. In the limit, I reserve the right to revise your participation grade as a consequence of grade grubbing.

There will be no make-up exam. Should you (justifiably) be absent from either one of the two midterms, your (quality-adjusted) grade on the midterm you did take will count for the entirety of your exam grade.

Email and Social Media Policy: If something is due electronically, I will always send you a confirmation email that states that I have (i) received your work; and (ii) successfully opened the file. If you do not receive such a confirmation email from me within an hour, email me again as soon as possible. Although I do use some forms of social media, I do not discuss matters of class administration (e.g., questions on the material, questions about grading, office hour requests, etc.) via social media.

As some of you may already know, I blog on development policy (and other, mostly related matters) at <http://marcfbellemare.com>. I do not insist that you read my blog, but be aware that I tend to both blog *and* write exam questions about what has been on my mind lately. I will be happy to offer anyone who is interested a tutorial on the use of Google Reader in order to minimize the transaction costs of following blogs and other web sites with an RSS feed.

Academic Integrity

I will strictly enforce Duke's Academic Integrity Policy (found online at the following URL: <http://trinity.duke.edu/academic-requirements?p=academic-integrity>), which is as follows:

"Intellectual and academic honesty are at the heart of the academic life of any university. It is the responsibility of all members of our academic community to abide by Duke's strict expectations regarding proper citation of sources. It is also critically important to resist strenuously the temptation to cheat. Acts of academic dishonesty, including plagiarism and cheating, are considered very serious offenses. Students found guilty of plagiarism, cheating, or other forms of academic dishonesty are generally suspended. The academic and nonacademic offenses recognized at Duke and the range of sanctions imposed for them are explained in the Duke Community Standard in Practice, distributed to each incoming student. Please read the handbook carefully and make sure you understand its content."

Readings

The following list of topics and readings is indicative – I might add or subtract some readings as we go along and as I discover new papers on the following topics. Asterisks (*) denote compulsory reading materials.

1. Introduction (Week of August 29)

- *Banerjee, A.V., and E. Duflo (2007), “The Economic Lives of the Poor,” *Journal of Economic Perspectives* 21(1): 141-167.
- *Banerjee, A.V., and E. Duflo (2011), chapter 1.
- Collier, P. (2007), *The Bottom Billion*, Oxford: Oxford University Press.
- Easterly, W. (2006), *The White Man’s Burden*, New York: Penguin Press.
- MacDonald, L. (2010), “The New Bottom Billion: Andy Sumner,” Global Prosperity Wonkcast, http://blogs.cgdev.org/global_prosperity_wonkcast/2011/02/28/the-new-bottom-billion-andy-sumner/ last accessed August 19, 2011.
- *Roberts, R. (2008), “Collier on the Bottom Billion,” EconTalk, http://www.econtalk.org/archives/2008/01/collier_on_the.html last accessed August 19, 2011.
- Roberts, R. (2011), “Banerjee on the Poor and Poor Economics,” EconTalk, http://www.econtalk.org/archives/2011/07/banerjee_on_pov.html last accessed August 19, 2011.
- Sachs, J. (2005), *The End of Poverty*, New York: Penguin Press.

2. Background Ideas and Methods (Week of September 5)

- Bardhan, P. (1993), “Economics of Development and the Development of Economics,” *Journal of Economic Perspectives* 7: 129-142.
- *Bellemare, M.F. (2011), “A Primer on Causality,” <http://marcfbellemare.com/wordpress/wp-content/uploads/2011/08/Causality.pdf> last accessed August 19, 2011.
- *Bellemare, M.F. (2011), “A Primer on Linear Regression,” <http://marcfbellemare.com/wordpress/wp-content/uploads/2011/08/Regression.pdf> last accessed August 19, 2011.
- Duflo, E., R. Glennerster, and M. Kremer (2008), “Using Randomization in Development Economics Research: A Toolkit,” in T.P. Schultz and J.A. Strauss, eds., *Handbook of Development Economics*, Volume 4, Amsterdam: Elsevier.
- *Duflo, E. (2010), “Social Experiments to Fight Poverty,” TED Talk, <http://tinyurl.com/duflo-ted> last accessed August 19, 2011.
- Glennerster, R., and M. Kremer (2011), “Small Changes, Big Results,” Boston Review, http://bostonreview.net/BR36.2/glennerster_kremer_behavioral_economics_global_development.php last accessed August 19, 2011.
- *Manzi, J. (2010), “What Social Sciences Does – and Doesn’t – Know,” *City Journal* http://www.city-journal.org/2010/20_3_social-science.html last accessed August 19, 2011.
- *Stiglitz, J.E. (1989), “Rational Peasants, Efficient Institutions, and a Theory of Rural Organization: Methodological Remarks for Development Economics,” in P. Bardhan, ed., *The Economic Theory of Agrarian Institutions*, Oxford: Clarendon Press.

3. Household and Intrahousehold Models (Week of September 12)

- Alderman, H., Chiappori, P.-A., L. Haddad, J. Hoddinott, and R. Kanbur (1995), "Unitary versus Collective Models of the Household: Time to Shift the Burden of the Proof?," *World Bank Research Observer* 10: 1-19.
- *Banerjee, A.V., and E. Duflo (2011), chapter 5.
- Bardhan, P., and C. Udry (1999), *Development Microeconomics*, Oxford: Oxford University Press.
- Benjamin D. (1992), "Household Composition, Labor Markets, and Labor Demand: Testing for Separation in Agricultural Household Models," *Econometrica* 60: 287-322.
- Browning, M., and P.-A. Chiappori (1998), "Efficient Intrahousehold Allocations: A General Characterization and Empirical Tests," *Econometrica* 66: 1241-1278.
- *Doss, C., (1995), "Testing among Models of Intrahousehold Resource Allocation," *World Development* 24: 1597-1609.
- Folbre, N. (1984), "Household Production in the Philippines: A Non-Neoclassical Approach," *Economic Development and Cultural Change* 32: 303-330.
- Lee, K., and M.F. Bellemare (2011), "Look Who's Talking: The Impact of the Intrahousehold Allocation of Mobile Phones on Agricultural Prices," Working Paper, Duke University.
- *Scott, J.C. (1976), *The Moral Economy of the Peasant*, New Haven, CT: Yale University Press.
- Singh, I., L. Squire, and J. Strauss (1986), *Agricultural Household Models*, Baltimore: Johns Hopkins University Press.
- Udry, C. (1996), "Gender, Agricultural Production, and the Theory of the Household," *Journal of Political Economy* 104: 1010-1046.

4. Market Participation (Week of September 19)

- *Aker, J., and I. Mbiti (2010), "Mobile Phones and Economic Development in Africa," *Journal of Economic Perspectives* 24(3): 207-232.
- *Barrett, C.B., M.E. Bachke, M.F. Bellemare, H. Michelson, S. Narayanan, T.F. Walker (2010), "Smallholder Market Participation in Agricultural Value Chains: Comparative Evidence from Three Continents," Working Paper, Cornell University.
- Bellemare, M.F. (2010), "As You Sow, So Shall You Reap: The Welfare Impacts of Contract Farming," Working Paper, Duke University.
- Bellemare, M.F., C.B. Barrett (2006), "An Ordered Tobit Model of Market Participation: Evidence from Kenya and Ethiopia," *American Journal of Agricultural Economics* 88: 324-337.
- de Janvry, A., M. Fafchamps, and É. Sadoulet (1991), "Peasant Household Behavior with Missing Markets: Some Paradoxes Explained," *Economic Journal*, 101: 1400-1417.
- Fafchamps, M., and R.V. Hill (2005), "Selling at the Farm Gate or Traveling to Market," *American Journal of Agricultural Economics* 87: 717-734.
- Grosh, B. (1994), "Contract Farming in Africa: An Application of the New Institutional Economics," *Journal of African Economies* 3: 231-261.
- Lee, K., and M.F. Bellemare (2011), "Look Who's Talking: The Impact of the Intrahousehold Allocation of Mobile Phones on Agricultural Prices," Working Paper, Duke University.

- *MacDonald, L. (2011), “Mobile Phones for Development—Hope vs. Hype,” Global Prosperity Wonkcast, http://blogs.cgdev.org/global_prosperity_wonkcast/2011/08/02/jenny-aker-mobile-phones-for-development%E2%80%94hope-vs-hype-2/ last accessed August 19, 2011.

5. Land (Week of September 26)

- *Barrett, C.B., M.F. Bellemare, and J.Y. Hou (2010), “Reconsidering Conventional Explanations of the Inverse Productivity—Size Relationship,” *World Development* 38: 88-97.
- *Bellemare, M.F. (2012), “Insecure Land Rights and Share Tenancy in Madagascar,” *Land Economics* forthcoming.
- Besley, T. (1995), “Property Rights and Investment Incentives: Theory and Evidence from Ghana,” *Journal of Political Economy* 103: 903-937.
- Brasselle, A.-S., F. Gaspart, and J.-P. Platteau (2002), “Land Tenure Security and Investment Incentives: Puzzling Evidence from Burkina Faso,” *Journal of Development Economics* 67: 373-418.
- de Soto, H. (2003), *The Mystery of Capital*, New York: Basic Books.
- Field, E. (2005), “Entitled to Work: Urban Property Rights and Labor Supply in Peru,” *Quarterly Journal of Economics* 122(4): 1561-1602.
- Goldstein, M., and C. Udry (2008), “The Profits of Power: Land Rights and Agricultural Investment in Ghana,” *Journal of Political Economy* 116: 981-1022.
- *Place, F. (2009), “Land Tenure and Agricultural Productivity in Africa: A Comparative Analysis of the Economics Literature and Recent Policy Strategies and Reforms,” *World Development* 37: 1326-1336.
- Roberts, R. (2011), “Karol Boudreaux on Property Rights and Incentives in Africa,” EconTalk, http://www.econtalk.org/archives/2007/12/karol_boudreaux.html last accessed August 19, 2011.
- Shaban, R.A. (1987), “Testing between Competing Models of Sharecropping,” *Journal of Political Economy* 95: 893-920.
- Stiglitz, J.E. (1974), “Incentives and Risk Sharing in Sharecropping,” *Review of Economic Studies* 41: 219-255.

6. Labor

6.1. Food and Nutrition (October 4 and October 13)

- *Banerjee, A.V., and E. Duflo (2011), chapter 2.
- *Barrett, C.B., and M.F. Bellemare (2011), “Why Food Price Volatility Doesn’t Matter,” *Foreign Affairs*, <http://www.foreignaffairs.com/articles/67981/christopher-b-barrett-and-marc-f-bellemare/why-food-price-volatility-doesnt-matter> last accessed August 19, 2011.
- *Bellemare, M.F., (2011), “Rising Food Prices, Food Price Volatility, and Political Unrest,” Working Paper, Duke University.
- Bellemare, M.F., C.B. Barrett, and D.R. Just (2010), “The Welfare Impacts of Commodity Price Fluctuations: Evidence from Rural Ethiopia,” Working Paper, Duke University.
- Jensen, R.T., and N.H. Miller (2010), “The Impact of Food Price Increases on Caloric Intake in China,” *Agricultural Economics* 39(s1): 465-476.

- Jensen, R.T., and N.H. Miller (2010), “Do Consumer Price Subsidies Really Improve Nutrition?,” *Review of Economics and Statistics* forthcoming.
- *MacDonald, L. (2011a), “Hedging Against Hunger,” Global Prosperity Wonkcast, http://blogs.cgdev.org/global_prosperity_wonkcast/2011/07/05/hedging-against-hunger-connie-veillette-ben-leo/ last accessed August 19, 2011.
- MacDonald, L. (2011b), “Famine in the Horn of Africa,” Global Prosperity Wonkcast, http://blogs.cgdev.org/global_prosperity_wonkcast/2011/08/09/famine-in-the-horn-of-africa-owen-barder/ last accessed August 19, 2011.
- Sahn, D. (1988), “The Effect of Price and Income Changes on Food-Energy Intake in Sri Lanka,” *Economic Development and Cultural Change* 36: 315-340.
- Strauss, J. and D. Thomas (1997), “Health, Nutrition, and Economic Development,” *Journal of Economic Literature* 36: 766-817.

6.2. Health (Week of October 17)

- *Banerjee, A.V., and E. Duflo (2011), chapters 3.
- *Dupas, P. (2009), “Do Teenagers Respond to HIV Risk Information? Evidence from a Field Experiment in Kenya,” *American Economic Journal: Applied Economics* forthcoming.
- *Hoffmann, V., C.B. Barrett, and D.R. Just (2009), “Do Free Goods Stick to Poor Households? Experimental Evidence on Insecticide Treated Bednets,” *World Development* 37(3): 607-617.
- Kremer, M., and E. Miguel (2004), “Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities,” *Econometrica* 72(1): 159-217.
- MacDonald, L. (2010), “Turning the Tide through Better Prevention,” Global Prosperity Wonkcast, http://blogs.cgdev.org/global_prosperity_wonkcast/2010/05/25/turning-the-tide-through-better-prevention-mead-over-on-the-aids-transition/ last accessed August 19, 2011.
- Strauss, J. and D. Thomas (1997), “Health, Nutrition, and Economic Development,” *Journal of Economic Literature* 36: 766-817.

6.3. Education (Week of October 24)

- *Banerjee, A.V., and E. Duflo (2011), chapter 4.
- *Chaudhury, N., J. Hammer, M. Kremer, K. Muralidharan, and F.H. Rodgers (2006), “Missing in Action: Teacher and Health Worker Absence in Developing Countries,” *Journal of Economic Perspectives* 20(1): 91-116.
- *Glewwe, P., M. Kremer, and S. Moulin (2009), “Many Children Left Behind? Textbooks and Test Scores in Kenya,” *American Economic Journal: Applied Economics* 1(1): 112-135.
- Kremer, M., and E. Miguel (2004), “Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities,” *Econometrica* 72(1): 159-217.
- Roberts, R. (2011), “Srour on Education, African Schools, and Building Tomorrow,” EconTalk, http://www.econtalk.org/archives/2008/12/srour_on_educat.html last accessed August 19, 2011.
- Rosenzweig, M.R. (2010), “Microeconomic Approaches to Development: Schooling, Learning, and Growth,” *Journal of Economic Perspectives* 24(3): 81-96.

- Schulz, T.P. (2004), "School Subsidies for the Poor: Evaluating the Mexican PROGRESA Poverty Program," *Journal of Development Economics* 74(1): 199-250.

7. Capital (Week of October 31)

- Ahlin, C., J.S. Lin, and M. Maio (2010), "Where Does Microfinance Flourish? Microfinance Institution Performance in Macroeconomic Context," *Journal of Development Economics* forthcoming.
- Armendáriz de Aghion, B., and J. Morduch (2005), *The Economics of Microfinance*, Cambridge: MIT Press.
- *Banerjee, A.V., and E. Duflo (2011), chapters 6, 7, and 8.
- Dupas, P., and J. Robinson (2011), "Why Don't the Poor Save More? Evidence from a Health Savings Experiment," NBER Working Paper.
- Karlan, D., and J. Zinman (2009), "Observing Unobservables: Identifying Information Asymmetries with a Consumer Credit Field Experiment," *Econometrica* 77(6): 1993-2008.
- Kochar, A. (1997), "An Empirical Investigation of Rationing Constraints in Rural Credit Markets in India," *Journal of Development Economics* 53: 339-371.
- Mbiti, I., and D.N. Weil (2011), "Mobile Banking: The Impact of M-PESA in Kenya," NBER Working Paper.
- *Morduch, J. (1999), "The Microfinance Promise," *Journal of Economic Literature* 37: 1569-1614.
- *Roberts, R. (2011), "Townsend on Development, Poverty, and Financial Institutions," EconTalk, http://www.econtalk.org/archives/2011/03/townsend_on_dev.html last accessed August 19, 2011.
- Roberts, R. (2011), "Munger on Microfinance, Savings, and Poverty," EconTalk, http://www.econtalk.org/archives/2011/04/munger_on_micro.html last accessed August 19, 2011.
- Stiglitz, J.E., and A. Weiss (1981), "Credit Rationing in Markets with Imperfect Information," *American Economic Review* 71: 393-410.

8. Technology Adoption (Week of November 7)

- *Duflo E., M. Kremer, and J. Robinson (2008), "How High Are Rates of Return to Fertilizer? Evidence from Field Experiments in Kenya," *American Economic Review Papers and Proceedings* 98(2): 482-488.
- Liu, E. (2010), "Time to Change What to Sow: Risk Preferences and Technology Adoption Decisions of Cotton Farmers in China," *Review of Economics and Statistics* forthcoming.
- *Feder, G., R.E. Just, and D. Zilberman (1985), "Adoption of Agricultural Innovations in Developing Countries: A Survey," *Economic Development and Cultural Change* 33(2): 255-298.
- Foster, A.D. and M.R. Rosenzweig (1995), "Learning by Doing and Learning from Others: Human Capital and Technical Change in Agriculture," *Journal of Political Economy* 103(6): 1176-1209.
- Foster, A.D., and M.R. Rosenzweig (2010), "Microeconomics of Technology Adoption," Working Paper, Yale University.

9. Institutions, Corruption, and Governance (Week of November 14)

- Acemoglu, D., S. Johnson, and J. Robinson (2001), "The Colonial Origins of Economic Development," *American Economic Review* 91(5): 1369-1401.
- *Aldashev, G. (2009), "Legal Institutions, Political Economy, and Development," *Oxford Review of Economic Policy* 25(2): 257-270.
- *Banerjee, A.V., and E. Duflo (2011), chapter 10.
- Besley, T., and M. Ghatak (2010), "Property Rights and Economic Development," Working Paper, London School of Economics.
- *La Porta, R., F. Lopez-de-Silanes, and A. Shleifer (2008), "The Economics Consequences of Legal Origins," *Journal of Economic Literature* 46(2): 285-332.
- Malmendier, U. (2009), "Law and Finance 'at the Origin'," *Journal of Economic Literature* 47(4): 1076-1108.
- Bardhan, P. (1997), "Corruption and Development: A Review of Issues," *Journal of Economic Literature* 35(3): 1320-1346.
- Bertrand, M., S. Djankov, R. Hanna, and S. Mullainathan (2007), "Obtaining a Driver's License in India: An Experimental Approach to Studying Corruption," *Quarterly Journal of Economics* 122(4): 1639-1676.
- *Chattopadhyay, R., and E. Duflo (2004), "Impact of Reservation in Panchayati Raj: Evidence from a Nationwide Randomized Experiment," *Economic and Political Weekly* 39(9): 979-986.
- Fisman, R., and E. Miguel (2008), *Economic Gangsters*, Princeton: Princeton University Press.
- Romer, P. (2010), "Zip It," *City Journal*, <http://www.city-journal.org/2010/eon0723pr.html> last accessed August 19, 2011.

(Week of November 21: No class on Tuesday, Thanksgiving on Thursday.)

(Week of November 28: Review session on Tuesday, Second Midterm on Thursday.)