

Humphrey School of Public Affairs
University of Minnesota

PA 5521

Development Planning and Policy Analysis, 4 credits

LEC 2:30-3:45 TTh, HHH 184

LAB 8:15-9:30 F HHH 85

Prof. Ragui Assaad

Office: HHH 252.

Tel: 612-625-4856

Email: assaad@umn.edu

Office Hours: Wed. 1:00-3:00

Thurs. 4:00-5:30

Sign-up at: <http://tinyurl.com/nt7eygf>

Prerequisite: PA 5031, Empirical Analysis or equivalent.

Course Description:

This course examines the techniques and assumptions of development planning and policy analysis at the national, program and project levels. The course focuses on modeling techniques and policy applications rather than on theory. It consists of three parts. First, you will learn how to analyze and interpret macroeconomic data in the context of an open macroeconomy model. Second, you will learn how to conduct financial and economic cost-benefit analyses and will apply what you learn to a real world project for a client. Third, you will become familiar with experimental and quasi-experimental impact evaluation techniques for development projects and programs. Students are assumed to have some background in the theories of economic development and to have had previous preparation in quantitative methods. While the focus will be on developing countries, many of the techniques covered will also have applications in the U.S. context.

Learning objectives:

- Provide an introduction to some widely used quantitative modeling techniques.
- Build an appreciation of the promise and pitfalls of quantitative modeling.
- Acquire a specific set of modeling and interpretation skills through hands-on application.
- Develop an ability to describe the macroeconomic context of a country based on an analysis of time series data on major economic variables.
- Learn to conduct financial and economic cost-benefit analyses of public and non-profit development interventions and programs and learn how to manage the complexities of real-world projects.
- Become effective and critical consumers of experimental and non-experimental impact evaluation studies of development programs and interventions

Course Requirements and Grading:

The class format will be lectures with active student participation through comments and questions. Students are expected to do the required readings prior to class and to actively

participate in class discussion. A weekly lab session is a required part of the class and will be used for hands-on data analysis and empirical applications.

Grading will be as follows:

	<u>% of Grade</u>	<u>Date Due</u>
Project # 1: Macroeconomic Analysis	25%	2/18
Midterm Exam	15%	2/25
Project # 2: Cost-Benefit Analysis	35%	4/15
Final Assignment: Review of non-experimental evaluation	25%	5/8

Course website: There is a Canvas course website.

Exam and Final Assignment. There will be one take-home open-book, open-notes mid-term exam. The exam will be made available on Friday February 22nd at 10am and will be due back on Monday February 25th at 6:00pm. The final assignment is a review of a non-experimental impact evaluation study, which will be due on Wednesday (5/8) at 6:00pm. Both the mid-term and the final assignment are to be completed individually.

Class Projects and Team Work: You will carry out two team projects. Project #1 is an analysis of macroeconomic data from 1970 to 2017 of a developing country that you will choose collectively in your team. Project #1 is due on Monday 2/18 at 6:00pm.

Project #2 is a financial and economic cost-benefit analysis of a real-world project for a client. This year we will analyze a ready-made garment factory in Qina, Egypt set up by the Egypt Network for Integrated Development (www.enid.org.eg). Project #2 is due on Monday 4/15 at 6:00pm.

The team will be formed by the instructor using information from an online survey to be filled on Canvas in the first week of class. The survey will elicit information on your abilities along several dimensions and your schedule, as well as suggestions of classmates you wish to work with and ones you cannot work with. One project report is expected from each team. The report should be submitted to the Canvas site no later than midnight on the due date. Each member of the team will evaluate themselves as well as other members of the team on attendance, preparation, participation, contribution on content and contribution on process. These evaluations will factor as part of your individual grade on the project. See “Tips for PA 5521 success” document on the Canvas site.

Workload expectations. According to University policy, undergraduates are expected to spend 3 hours on homework per credit hour per week, on average, in order to achieve an average grade. For this class, that means that 9 hours per week on homework would be expected for undergraduates. Expectations are higher for graduate students.

Extra credit. No extra credit will be allowed in this class.

Missed exams and late work. Missed exams can be made up if the instructor is informed in advance and agrees that the reason for delay is valid. Late work will be marked down at the instructor's discretion. Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. Such circumstances include verified illness, participation in intercollegiate athletic events, subpoenas, jury duty, military service, bereavement, and religious observances. Such circumstances do not include voting in local, state, or national elections. For complete information, please see:
<http://policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html>

Incompletes. This course follows the Humphrey School policy regarding incompletes. An incomplete will only be granted after the instructor and the student have mutually agreed upon a timetable (written contract) for completion of coursework. An incomplete must be requested in advance, and the Humphrey School incompletes form must be filled out.

Disabilities. It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact their instructor early in the semester to discuss their individual needs for accommodations. Accommodations must be arranged in advance. Further information is available from Disabilities Services (230 McNamara Hall).

Electronics in class. You may use your laptop computer in class for note-taking or (rarely) looking up answers to questions that come up in class. You may not use it for checking email or Facebook or anything else. It's very tempting – and also inappropriate, not to mention detrimental to your education. First offenders are asked to turn off the computer for the class. Second offenders are required to keep computers put away for the rest of the semester. Similarly, **cell phones and smart phones** and the like may kept on and visible by people with small children or similar responsibilities (but tell the instructor); everyone else is expected to keep their electronics out of sight and out of hearing.

Academic integrity. Academic integrity is essential for a positive teaching and learning environment. All students enrolled in this course are expected to complete course-related responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others, by misrepresenting someone else's work as your own, or by another kind of scholastic dishonesty can result in disciplinary action, including receiving an F or an N for the course.

Scholastic misconduct is broadly defined as any act that violates the right of another student in academic work or that involves misrepresentation of your own work. Scholastic dishonesty includes, (but is not necessarily limited to): cheating on assignments or examinations; plagiarizing, which means misrepresenting as your own work any part of work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned; depriving another student of necessary course materials; or interfering with another student's work. Student

Conduct Code: http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf

Sexual harassment. "Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents

Policy: <https://policy.umn.edu/hr/sexharassassault>

Equity, diversity, equal opportunity, and affirmative action: The University will provide equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents

Policy: http://regents.umn.edu/sites/default/files/policies/Equity_Diversity_EO_AA.pdf.

Appropriate student use of class notes and course materials: Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community. For additional information, please see: <http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html>.

Resources for Success:

Student Writing Support at the Center for Writing. Student Writing Support provides free writing instruction for all University of Minnesota students – graduate and undergraduate – at all stages of the writing process. They help students develop productive writing habits and revision strategies via in-person consultations. See writing.umn.edu/sws/index.html. It is also possible to submit short papers online to the Student Writing Support page at the Center for Writing and get comments and feedback from experienced writing tutors.

Mental health. As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. University of Minnesota services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website at <http://www.mentalhealth.umn.edu>

Course Topics and Schedule

I. Macroeconomic Accounting and Modeling:

Topic #1 (1/22, 1/24):	National Accounts: Definitions and Identities.
Lab #1 (1/25):	Downloading Data from the World Development Indicators (WDI) Database http://data.worldbank.org/data-catalog/world-development-indicators
Topic #2 (1/29, 1/31)	Fiscal Accounts, Price indices Trade and Balance of Payments Accounts
Lab #2 (2/1):	Analysis of Macroeconomic data using Excel
Topic #3 (2/5, 2/7):	Exchange Rates: Definitions and Significance
Lab #3 (2/8):	Analysis of Macroeconomic data using Excel and interpreting the results: The Case of the Philippines
Topic #4 (2/12, 2/14):	Forces Affecting the Real Exchange Rate: External Shocks, stabilization and Trade Policy
Lab #4 (2/15):	Calculating Effective, Real and Equilibrium Exchange Rates: The Case of Pakistan

II. Project Appraisal and Cost-Benefit Analysis:

Topic #5 (2/19, 2/21, 2/26, 2/28):	Financial Cost-Benefit Analysis
Lab #5 (2/22)	Example of a Resource Statement: the Carton Project
Lab #6 (3/1):	Case Analysis (“Cost-Benefit Analysis of Ready-Made Garment Factory to Employ Women in Qina, Egypt”)
Topic # 6 (3/5, 3/7, 3/12):	Economic Cost Benefit Analysis
Lab #7 (3/8):	Case Analysis (Contn’d)
Lab #8 (3/15):	Case Analysis (Contn’d)
Topic #7 (3/14)	Non-Traded Outputs in Cost-Benefit Analysis

III. Program Impact Evaluation

Topic #8 (3/26, 3/28, 4/2)	Causal Inference and Program Impact Evaluation
Lab #9 (3/29)	Case Analysis (Contn’d)
Topic # 9 (4/4)	Randomized Evaluations
Lab #10 (4/5)	Examples of Randomized Evaluations
Topic #10 (4/9, 4/11)	Regression and Propensity Score Matching and Weighting Methods
Lab #11 (4/12)	Propensity Score Matching in Practice
Topic # 11 (4/16, 4/18)	Difference-in-Difference Methods
Lab # 12 (4/19)	Sample size determination for treatment and control groups
Topic # 12 (4/23, 4/25)	Instrumental Variable Methods
Lab# 13 (4/26)	Instrumental Variable Methods
Topic # 13 (4/30, 5/1)	Regression Discontinuity Methods and Conclusion of Course

There is no lab on 5/3.

Course Readings

I. Macroeconomic Accounting and Modeling:

Topic # 1: National Accounts: Definitions and Identities.

Required:

Ghatak, S., N. Healey and P. Jackson. 1992. *The Macroeconomic Environment*. London: Weidenfeld and Nicolson, pp. 8-34. (Chapter 2: Measuring the Macro-Economy)

Chugh, Sanjay K. 2003. A Short Course in Introductory Macroeconomics. Ch 1 (pp 4-7)
<http://www.skchugh.com/images/IntroReview.pdf>

United Nations. 1968. *A System of National Accounts*. Series F, no. 2, rev. 3. New York: United Nations. Ch. 1: 1-16.

You will also need to refer to the following to complete Project # 1:

World Bank. World Development Indicators Database (Available online:
<http://data.worldbank.org/data-catalog/world-development-indicators>
Select series of interest and click on notes to see definition.

Topic #2 Fiscal Accounts, Price indices Trade and Balance of Payments Accounts

Required:

Dornbusch, R. 1980. *Open Economy Macroeconomics*. New York: Basic Books. Ch. 2: "Some basic relations." pp. 12-24.

Schmitt-Grohe, S. and M. Uribe. 1998. *International Macroeconomics*. Pp. 1-15.
<http://www.columbia.edu/~mu2166/UIM/notes.pdf>

Rukujan, S. *Open-Economy Macroeconomics: Basic Concepts*.
<http://www.ukm.my/hairun/Ecn3100/open%20macroeconomics.pdf>

Suggested:

Chugh, Sanjay K. 2003. A Short Course in Introductory Macroeconomics. Ch 3 (pp 22-30)
<http://www.skchugh.com/images/IntroReview.pdf>

Roemer, M. and J. Stern. 1981. *Cases in Economic Development: Projects, Policies, and Strategies*. London: Butterworths. Part II, Report 1, pp. 29-4, Report 3, pp. 49-65

Taylor, L. 1979. *Macro Models for Developing Countries*. New York: McGraw Hill. Ch. 2: "Numbers for national planning." pp. 12-29.

Wonnacott, T. and R. Wonnacott 1990. *Introductory Statistics for Business and Economics*. New York: John Wiley. Ch. 22: "Index numbers." pp. 664-677.

Topic # 3: Exchange Rates: Definitions and Significance

Required:

Sadoulet, Elizabeth and Alain de Janvry. 1995. *Quantitative Development Policy Analysis*. Baltimore: The Johns Hopkins University Press. Ch. 8, Sections 8.1-8.3 (pp. 214-221) & Exercise 8 (pp. 233-236). Skip Section 8.4 and 8.5 for now.

Topic # 4: Forces Affecting the Real Exchange Rate: External Shocks, Stabilization and Trade Policy

Required:

Helmets, L. 1988. "The Real Exchange Rate," in *The Open Economy: Tools for Policymakers in Developing Countries*, R. Dornbusch and C.H. Helemers (eds), Washington D.C.: Published for the World Bank by Oxford University Press, (Ch. 2), pp. 10-33.

Sadoulet, Elizabeth and Alain de Janvry. 1995. *Quantitative Development Policy Analysis*. Baltimore: The Johns Hopkins University Press. Ch. 8, Sections 8.4 (pp. 221-228). Skip section 8.5.

Suggested:

Dornbusch, R. 1988. "Overvaluation and the Trade Balance," *The Open Economy: Tools for Policymakers in Developing Countries*, pp. 80-107.

Edwards, Sebastian. 1989. *Real Exchange Rates, Devaluations and Adjustment*. Cambridge: MIT Press.

II. Project Appraisal and Cost-Benefit Analysis

Topic # 5: Financial Cost-Benefit Analysis

Required:

Curry, S. and J. Weiss. 1993. *Project Analysis in Developing Countries*. New York: St. Martin's Press, Chs. 1-3.

European Commission. 2014. Guide to Cost-Benefit Analysis of Investment Projects. Pp. 25-40, and pp. 67-74. https://ec.europa.eu/inea/sites/inea/files/cba_guide_cohesion_policy.pdf

Suggested:

Roemer, M. and J. Stern 1981. *Cases in Economic Development: Projects, Policies, and Strategies*. London: Butterworths, pp. 79-96.

Squire, L and H. van der Tak. 1975/1992. *Economic Analysis of Projects* Baltimore: Published for the World Bank by Johns Hopkins University Press. Seventh printing 1992. Introduction and Chs 1,2,4. pp. 3-25, pp. 39-46.

Topic # 6: Economic Cost Benefit Analysis and the Use of Shadow Prices

Required:

Curry and Weiss (1993), Ch. 4, pp. 74-91.

Roemer, M. and Stern, J. 1975. *The Appraisal of Development Projects: A Practical Guide to Project Analysis with Case Studies and Solutions*. New York: Praeger Publishers. Ch. 3, pp. 43-77.

Topic # 7 Non-Traded Outputs in Cost-Benefit Analysis

Required:

Curry and Weiss (1993), Ch. 7, pp. 164-182.

Suggested:

Squire and van der Tak (1975/1992), Ch. 7.

Roemer, M. and J. Stern 1981. *Cases in Economic Development: Projects, Policies, and Strategies*. London: Butterworths, pp. 124-130.

III. Program Impact Evaluation

Topic #8 Introduction to Program Impact Evaluation

Required:

Ravallion, Martin. 2008. "Evaluation in the Practice of Development." Policy Research Working Paper 4547. The World Bank, Washington DC.

Khandker, S. R., G. B Koolwal, H. Samad. 2010. Handbook on Impact Evaluation: Quantitative Methods and Practices. Washington D.C.: The World Bank. Chs 1-2, pp. 1-31
<https://openknowledge.worldbank.org/handle/10986/2693>

Suggested:

Baker, Judy. 2000. *Evaluating the Impacts of Development Projects on Poverty: A Handbook for Practitioners*. The World Bank, Washington D.C., pp. 1-16.

Ravallion, Martin. 2007. "Evaluating Anti-Poverty Programs," In T. Paul Schultz and John Strauss (eds.) *Handbook of Development Economics, Volume 4*. Amsterdam: Elsevier. Read Sections 1-3, pages 3787-3792.

If you find Ravallion (2007) very difficult to follow, I recommend you read the following paper, which is much more accessible and also more entertaining:

Ravallion, Martin. 2001. "The Mystery of the Vanishing Benefits: An Introduction to Impact Evaluation." *The World Bank Economic Review*, 15(1): 115-140.

Topic # 9: Randomized Evaluations

Required:

Khandker, S., G.B. Koolwal, and H. Samad. 2010. *Handbook on Impact Evaluation: Quantitative Methods and Practices*. Washington DC: The World Bank. Chapter 3, pp. 33-52.

Card, David, Pablo Ibarrran, Ferdinando Regalia, David Rosas, Yuri Soares. 2007. "The Labor Market Impacts of Youth Training in the Dominican Republic: Evidence from a Randomized Evaluation. NBER Working Paper Series. Working Paper 12883.
<http://www.nber.org/papers/w12883>

Suggested:

Duflo, Esther, Rachel Glennerster, and Michael Kremer. 2008. "Using Randomization in Development Economics Research: A Toolkit." In *Handbook of Development Economics*, vol. 4, ed. T. Paul Schultz and John Strauss, 3895–962. Amsterdam: North-Holland.

Topic #10: Regression and Propensity Score Matching Methods

Required:

Khandker, S., G.B. Koolwal, and H. Samad. 2010. *Handbook on Impact Evaluation: Quantitative Methods and Practices*. Washington DC: The World Bank. Chapter 4, pp. 53-70.

Suggested:

Ravallion, Martin. 2007. "Evaluating Anti-Poverty Programs," In T. Paul Schultz and John Strauss (eds.) *Handbook of Development Economics, Volume 4*. Amsterdam: Elsevier. Pp. 3787-3846. Focus on Section 5, pp. 3805-3811.

Topic #11: Example of Matching Methods

Required:

Bensch, G., J. Kluge and Jorg Peters (2011). "Impact of rural electrification in Rwanda" *Journal of Development Effectiveness*, 3(4): 567-588

Topic #12: Difference-in-Difference Method

Required:

Khandker, S., G.B. Koolwal, and H. Samad. 2010. *Handbook on Impact Evaluation: Quantitative Methods and Practices*. Washington DC: The World Bank. Chapter 5, pp. 71-84.

Gertler, Paul, Harry Patrinos and Marta Rubio-Codina 2008. "Empowering Parents to Improve Education: Evidence from Rural Mexico." World Bank Policy Research Working Paper 3935. The World Bank, Washington DC.

Topic # 13: Application of Instrumental Variable Method

Required:

Khandker, S., G.B. Koolwal, and H. Samad. 2010. *Handbook on Impact Evaluation: Quantitative Methods and Practices*. Washington DC: The World Bank. Chapter 6, pp. 87-102.

Attanasio, Op ; Di Maro, V ; Vera-Hernandez, M. COMMUNITY NURSERIES AND THE NUTRITIONAL STATUS OF POOR CHILDREN. EVIDENCE FROM COLOMBIA" *Economic Journal*, 2013 Sep, Vol.123(571), pp.1025-1058

Topic #14: Regression Discontinuity Method

Required:

Khandker, S., G.B. Koolwal, and H. Samad. 2010. *Handbook on Impact Evaluation: Quantitative Methods and Practices*. Washington DC: The World Bank. Chapter 7, pp. 103-114.

Ozier, Owen 2018. "The Impact of Secondary Schooling in Kenya: A Regression Discontinuity Analysis." *Journal of Human Resources*, 2018, Vol.53(1), pp.157-188.