

Amherst College
Department of Economics
Economics 412
Spring 2017

Professor Jessica Reyes
Office: Converse 304A
Email: jwreyes@amherst.edu
Office Hours: Wed. 10:30-12:30

ECONOMICS 412: APPLIED MICROECONOMICS

The field of applied microeconomics (“applied micro”) is a fundamentally outward-looking branch of economics. Applied microeconomists take economic theories and methodologies out into the world in order to apply them to interesting questions of individual behavior and societal outcomes. This upper-level seminar will start with an overview of the field and its methodologies, followed by foundational material in economic theory and econometric identification. We will then address substantive areas such as environmental effects on health, the fetal origins hypothesis, and the economics of crime, gender, and race. Most of the course will be devoted to close reading of research papers, including discussion of the relative merits of particular theoretical and empirical methodologies.

Prerequisites

Economics 300 or 301 : Microeconomic Theory

Economics 360 or 361 : Econometrics (can be taken concurrently with faculty permission)

Class

Class meets Wednesdays from 2:00 to 4:30 in Converse 309.

You must attend every class, and you must arrive on time and be prepared to discuss the material.

You must bring paper copies of the reading. No technology use is permitted in class.

Approach

Most of the course will be devoted to close reading of research papers, including discussion of the relative merits of particular theoretical and empirical methodologies. Students will participate actively in class discussion, engage with cutting-edge research, make oral presentations, evaluate empirical data, and write an analytical paper.

Class Participation

This seminar provides you an opportunity to grow as an economic thinker. You can make the most of that opportunity by reading actively and coming to class prepared. To read actively, make sure you ask yourself questions as you go along – what is the author doing, why, what do you think of it? Make notes, jot down questions, mark up your copy of the article, and bring thoughts and questions to class. When in class, we will work to develop our discussion skills so that we foster close engagement with the literature of applied microeconomics.

Readings

Most of our reading will be journal articles from the economics literature. These readings are available online as e-reserves on the course website and on reserve in Frost Library. In order to be able to read actively and to participate fully in class discussion, you must bring hard copies to class, so I encourage you to put together a paper coursepack in a binder. (Past experience shows that we are able to achieve much richer engagement with the work when we all have hard copies in front of us.)

There is one *required* book for this course:

Joshua D. Angrist & Jörn-Steffen Pischke (2014). *Mastering 'Metrics: The Path from Cause to Effect*. Princeton University Press.

There are three *recommended* books for this course:

Alan Acock (2014). *A Gentle Introduction to STATA*. STATA Press.
(I suggest the Revised 3rd edition, but the 3rd, 4th, or 5th editions should be fine also.)

Stephen Greenlaw (2005). *Doing Economics: A Guide to Understanding and Carrying Out Economic Research*. Southwestern.

Peter Kennedy (2003). *A Guide to Econometrics, 5th Edition*. MIT Press.

The above books are available to borrow from Frost Library Reserves. There are also copies to consult in the Economics Computer Lab. (Do not remove these books from the lab.)

Grading

Grades for the course will be based on a variety of assignments, as follows:

- Reading and class participation (20%)
- Engagement papers (20%)
- Class discussion facilitation (5%)
- Empirical assignments (20%)
- Term paper plan, conference, components, and draft (15%)
- Term paper (20%)

Engagement Papers

These short papers will provide you an opportunity to engage with some aspect of one of the articles we are reading for class that week. You may choose the topic freely, but I may provide some guidance in the week prior as well, pointing you towards particular issues. You should do one of these every week. Post your paper on Moodle by 9 am the morning before class and bring a paper copy to class. Your submission should be no more than 300 words. The first line of your submission should include a title as follows: last name of the first author followed by your main point (e.g. “Duggan: How to Measure Gun Ownership”). While you should do one every week, I’ll only count the grades from 8 of these.

Class Discussion Facilitation

For a specific class, you will each be asked to bring a well-formed topic for discussion. This will be a particular empirical or theoretical issue you find impressive, interesting, troubling, or simply puzzling in one of the papers for discussion that day. Bring your question, raise it, and foster discussion. I will distribute a schedule for these discussions. Email me your question by 9 am the morning before class.

Empirical Assignments

There will be a number of empirical assignments during the semester. In the first few, you will develop your STATA skills. In the others, you will complete small data analyses related to the papers we are discussing. These assignments will be distributed at least a week before they are due. Turn in a PDF copy on Moodle by 9: am the morning before class, and bring a paper copy to class.

Term Paper

There are several articles on the syllabus for which the datasets are publicly available. You will choose one of these articles to engage with closely during the semester. This engagement will involve a number of elements:

- Summary: create a one-page summary of the paper.
- Possible questions: identify several key issues or questions. This will serve as the jumping-off point for the conference.
- Replication: replicate the paper's main results.
- Conference: meet with me to discuss the empirical or theoretical issues you find interesting in the paper, and vet them as possible topics for your term paper.
- Plan: make a plan to use the paper's data to answer a question that is related to the paper's main question but is not directly covered in the paper itself, or that is answerable using the paper's data even if only tangentially related to the paper itself.
- Methods section: write up the methods section, including your econometric specification and planned tables.
- Stata code: turn in the code you will use to implement your plan.
- Draft: turn in a draft. We will discuss it and I will provide feedback to aid your revision process.
- Paper: implement and discuss your analysis, turning in a 10-15 page paper.

Academic Honesty

Students must abide by the *Amherst College Honor Code*.

Your work must be your own. If you consult any sources (including online sources), you must cite them clearly and completely; failure to do so constitutes plagiarism. If you work with others, you must make a note of that on your own assignment.

So that you have a clear understanding of your ethical obligations, I ask that you carefully reread the *Statement of Intellectual Responsibility*. The following link may be helpful:

<https://www.amherst.edu/offices/student-affairs/community-standards/college-standards/honor-code>

Remember that discussion of articles with peers and collaboration on empirical assignments are both valuable ways to learn. However, we all know the line between our own work and someone else's work. Do not cross that line.

COURSE OUTLINE AND READINGS

January 25th

- Introduction
 - Steven A. Greenlaw. *Doing Economics*, Boston, MA: Houghton Mifflin, 2006. Chapter 6: Critical Reading.
 - Janet Currie. “Program Report: Children.” *NBER Reporter*, 2016 Number 4. <http://www.nber.org/reporter/2016number4/#report>
 - Raj Chetty and Amy Finkelstein. “Program Report: The Changing Focus of Public Economics Research, 1980-2010.” *NBER Reporter*, 2012 Number 1. <http://www.nber.org/programs/pe/pe.html>
 - Pick an interesting article or two from the NBER working paper series and read it...

February 1st

- The Economic Model
 - Any microeconomics textbook: review the classical economic model of individual behavior.
 - Edward P. Lazear. 2015. “Gary Becker’s Impact on Economics and Policy.” *American Economic Review*, May 2015, 105(5): 80–84. doi: 10.1257/aer.p20151107
- Understanding Evidence
 - Angrist & Pischke. *Mastering Metrics*. Introduction.
 - Angrist & Pischke. *Mastering Metrics*. Chapter 1: Randomized Trials
 - Angrist & Pischke. *Mastering Metrics*. Chapter 2: Regression
 - Revisit one of the NBER working papers you identified above and read it again...
 - Stephen Few. *Show me the Numbers*, Oakland, CA: Analytics Press, 2004. Chapters: 1. Introduction, 3. Fundamental Concepts of Tables and Graphs, and 5. Fundamental Variations of Graphs. (skim)

February 8th

- Deepening the Economic Model of Behavior
 - Austan Goolsbee, Steven Levitt, and Chad Syverson. “Behavioral and Experimental Economics,” Chapter 17 in *Microeconomics*, Worth Publishers 2012.
 - Stefano DellaVigna. 2009. “Psychology and Economics: Evidence from the Field.” *Journal of Economic Literature*, 47(2): 315-372. doi: 10.1257/jel.47.2.315 (skim)
- Doing Econometrics
 - Peter F. Kennedy. “Introduction,” *A Guide to Econometrics*, 5th ed., Cambridge, MA: MIT Press, 2003.
 - Alan C. Acock. *A Gentle Introduction to Stata*, 3rd ed. Chapters 1, 4, 5. College Station, TX: Stata Press.
 - Steven D. Levitt and John A. List. 2011. “Was There Really a Hawthorne Effect at the Hawthorne Plant? An Analysis of the Original Illumination Experiments” *American Economic Journal: Applied Economics*, January 2011, 3(1): 224-238. ***

February 15th

- Methodology Case Study: Differences in Differences
 - Angrist & Pischke. *Mastering Metrics*. Chapter 5: Differences in Differences
 - Leora Friedberg. 1998. “Did Unilateral Divorce Raise Divorce Rates? Evidence from Panel Data,” *American Economic Review*, June 1998, 88(3): 608-627.
 - John Donohue and Steven Levitt. 2001. “The Impact of Legalized Abortion on Crime,” *Quarterly Journal of Economics*, May 2001, 116(2): 379-420.

February 22nd

- Early Life Influences and the Fetal Origins Literature
 - Douglas Almond and Janet Currie. 2011. “Killing Me Softly: The Fetal Origins Hypothesis,” *Journal of Economic Perspectives*, Summer 2011, 25(3): 153-172. doi 10.1257/jep.25.3.153
 - Council of Economic Advisors to President Barack Obama. 2016. “Inequality in Early Childhood and Effective Public Policy Interventions,” Chapter 4 in the *Economic Report of the President*.
 - David M. Cutler, Wei Huang, Adriana Lleras-Muney. 2016. “Economic Conditions and Mortality: Evidence from 200 Years of Data,” NBER Working Paper No. 22690.
 - Raj Chetty, Nathaniel Hendren and Lawrence F. Katz. “The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment (#2),” *American Economic Review*, Vol. 106, Issue 4, April 2016.

March 1st

- Environment and Health
 - Joshua Graff Zivin and Matthew Neidell. 2013. “Environment, Health, and Human Capital,” *Journal of Economic Literature*, September 2013, 51(3): 689–730. doi: 10.1257/jel.51.3.689
 - Angrist & Pischke. *Mastering Metrics*. Chapter 3: Instrumental Variables
 - Jessica W. Reyes. 2015. “Lead Exposure and Behavior: Effects on Antisocial and Risky Behavior among Children and Adolescents.” *Economic Inquiry*, July 2015, 53(3): 1580-1605.
- Applied Econometrics
 - Peter F. Kennedy. “Applied Econometrics,” *A Guide to Econometrics*, 5th ed., Cambridge, MA: MIT Press, 2003.

March 8th

- Race, Policing, and Criminal Justice
 - David S. Abrams, Marianne Bertrand, and Sendhil Mullainathan. 2012. “Do Judges Vary in Their Treatment of Race?” *The Journal of Legal Studies*, June 2012, 41(2): 347-383.
 - Eduardo Bonilla-Silva. 2014. “The Central Frames of Color-Blind Racism,” Chapter 3 in *Racism Without Racists*, 4th edition.
 - Various articles (to be chosen) about Roland Fryer’s work on racial bias in policing.

March 22nd

- Crime
 - Gordon Dahl and Stefano DellaVigna. 2009. "Does Movie Violence Increase Violent Crime?" *Quarterly Journal of Economics*, May 2009, 124(2): 677-734. ***
 - Mark Duggan. 2001. “More Guns, More Crime,” *Journal of Political Economy*, October 2001, 109(5): 1086-1114.

March 29th

- Racial Discrimination
 - “Ban the Box? An Effort to Stop Discrimination May Actually Increase It,” Sendhil Mullainathan, *New York Times*, August 19, 2016.
 - “The Wrong Side(s) of the Tracks,” Elizabeth Ananat, *American Economic Journal: Applied Economics* 3(2): 34-66, 2011. doi: 10.1257/app.3.2.34
 - Marianne Bertrand and Sendhil Mullainathan. 2004. “Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination.” *American Economic Review*, 94(4): 991-1013. *** doi: 10.1257/0002828042002561

April 5th

- Gender in the Labor Market
 - Claudia Goldin. 2014. “A Grand Gender Convergence: Its Last Chapter.” *American Economic Review*, April 2014, 104(4): 1091-1119.
 - Muriel Niederle and Lise Vesterlund. 2007. “Do Women Shy Away from Competition? Do Men Compete Too Much?,” *Quarterly Journal of Economics*, August 2007, 122(3): 1067-1101.
 - Muriel Niederle, Carmit Segal, and Lise Vesterlund. 2013. “How Costly is Diversity? Affirmative Action in Light of Gender Differences in Competitiveness”, *Management Science*, January 2013, 59(1): 1-16. doi: 10.1287/mnsc.1120.1602

April 12th

- Gender and Crime
 - Lakshmi Iyer, Anandi Mani, Prachi Mishra, and Petia Topalova, 2012. “The Power of Political Voice: Women's Political Representation and Crime in India,” *American Economic Journal: Applied Economics*, October 2012, 4(4): 165-93. ***
doi: 10.1257/app.4.4.165
 - Michael Baker, Jonathan Gruber, Kevin Milligan. 2015. “Non-Cognitive Deficits and Young Adult Outcomes: The Long-Run Impacts of a Universal Child Care Program,” *NBER Working Paper No. 21571*.

April 19th

- Presenting Results
 - Stephen Few. *Show me the Numbers*, Oakland, CA: Analytics Press, 2004. Chapters: 6. Visual Perception and Quantitative Communication and 7. General Design for Communication.
 - Steven A. Greenlaw. *Doing Economics*, Boston, MA: Houghton Mifflin, 2006. Chapter 12: Communicating the Results of a Research Project.
- Discuss final papers

April 26th

- Wrap-up, discuss final papers