

APPLIED ECONOMICS

Fudan University

Department: School of Economics

Date: 2021-2-22

Course Code			
Course Title	Applied economics		
Credit	4	Credit Hours	72
Course Nature	<input type="checkbox"/> Specific General Education Courses <input type="checkbox"/> Core Courses <input type="checkbox"/> General Education Elective Courses <input type="checkbox"/> Basic Courses in General Discipline <input type="checkbox"/> Professional Compulsory Courses <input checked="" type="checkbox"/> Professional advanced Courses <input type="checkbox"/> Others		
Course Objectives	The focus of this course is for you to understand how to use econometric tools to answer interesting and important economic questions. You will (hopefully) finish this course with a better understanding of how to approach an empirical question, what kind of data you would need to answer your question, how to interpret your results and much more.		
Course Description	This course is designed to be a user-friendly approach to practical econometric analysis for advanced undergraduate students or master students. This is meant to be an applied course, though, I will be using significant amounts of mathematical notation throughout the lectures. This class may not come off as the most exciting class in your schedule but it may turn out to be one of the most useful classes once you graduate (particularly if you go into some sort of program evaluation type job).		
Course Requirements: Prerequisites: Basic familiarity with elementary calculus and statistics is required. Matrix algebra would be helpful.			
Teaching Methods: Lecture, presentation, group discussion			

Instructor's Academic Background:

Zhou Yu

Ph.D.in Economics, University of Michigan, Ann Arbor, 2014

M.A. in Statistics, University of Michigan, Ann Arbor, 2011

M.A. in Economics University of Michigan, Ann Arbor, 2009

M.A. in Economics, Peking University, 2007

B.A. in Architectural History Peking University, 2004

Members of Teaching Team

Name	Gender	Professional Title	Department	Responsibility
Zhou Yu	Female	Lecturer	Economics	

Course Schedule

Note: Schedule subject to change (and it most likely will). Please see course website for most up-to-date schedule.

DATE	CLASS
Week 1	Statistical Review
Week 2	Semiparametric and Nonparametric Estimation
Week 3	Randomly Controlled Trials and Key Objects of Interest
Week 4	Difference in Difference I: Background and Identification
Week 5	Difference in Difference II: General Case
Week 6	Difference in Difference III: Individual Panel Data
Week 7	Difference in Difference IV: Synthetic Controls
Week 8	Regression Discontinuity I: Background and Identification
Week 9	Regression Discontinuity II: Sharp RD
Week 10	Regression Discontinuity III: Fuzzy RD
Week 11	Regression Discontinuity IV: Nonparametric vs. Parametric
Week 12	Bunching I: Background and Identification
Week 13	Bunching II: Bunching at Kinks
Week 14	Bunching III: Bunching at Notches
Week 15	Final Week

The design of class discussion or exercise, practice, experience and so on:

Lecture, paper

If you need a TA, please indicate the assignment of assistant:

Yes, a TA is needed and will help the lecturer with the attendency, organization of group discussion.

Grading & Evaluation (Provide a final grade that reflects the formative evaluation process):

- (a) 5 homework assignments (20%)+one in-class presentation (10%)
- (b) One midterm exam (30%)
- (c) The final proposal (40%)

Teaching Materials & References (Including Author, Title, Publisher and Publishing time):

Required textbooks:

Mainly Lecture Notes;

Wooldridge, Jeffrey. *Introductory Econometrics: A Modern Approach*, 4th Edition.

Joshua D. Angrist and Jorn-Steffen Pischko. *Mostly Harmless Econometrics: An Empiricist's Companion*

Textbook website: <http://www.cengage.com/highered/>

Recommended books:

- 1. Acock, Alan C. *A Gentle Introduction to Stata*, 3rd Edition. Stata Corporation.
- 2. Stock, James H., and Mark W. Watson. *Introduction to Econometrics*, 2nd Edition. Pearson Education, Inc.

Additional reading material:

- 1. "Do Workers Pay for On-The-Job Training?"
By John M. Barron, Mark C. Berger, and Dan A. Black
The Journal of Human Resources, Vol. 34, No. 2, (Spring, 1999), p.235-252.
Available at <http://www.jstor.org/stable/146344>
- 2. "A Reanalysis of the Effect of the New Jersey Minimum Wage Increase on the Fast-Food Industry with Representative Payroll Data,"
By David Card and Alan B. Krueger
The American Economic Review, Vol. 90, No. 5, (Dec., 2000), p.1397-1420.
Available at <http://www.jstor.org/stable/2677856>
- 3. "Time-Series Evidence of the Effect of the Minimum Wage on Youth Employment and Unemployment,"
By Charles Brown, Curtis Gilroy, and Andrew Kohen
The Journal of Human Resources, Vol. 18, No. 1, (Winter, 1983), p.3-31.
Available at <http://www.jstor.org/stable/145654>
- 4. "An Illustration of a Pitfall in Estimating the Effects of Aggregate Variables on Micro Units,"

- By Brent R. Moulton
The Review of Economics and Statistics, Vol. 72, No. 2, (May, 1990), p.334-338.
 Available at <http://www.jstor.org/stable/2109724>
5. “Intergenerational Income Mobility in the United States,”
 By Gary Solon
The American Economic Review, Vol. 82, No. 3, (Jun., 1992), p.393-408.
 Available at <http://www.jstor.org/stable/2117312>
6. The Role of Premarket Factors in Black-White Wage Differences,”
 By Derek A. Neal and William R. Johnson
The Journal of Political Economy, Vol. 104, No. 5, (Oct., 1996), p.869-895.
 Available at <http://www.jstor.org/stable/2138945>
7. “Estimating Treatment Effects in Randomized Clinical Trials with Non-Compliance: The Impact of Maternal Smoking of Birthweight,”
 By Barton H. Hamilton
Health Economics, Vol. 10, No. 5, (Jul., 2001), p.399-410.
 Available at <http://www3.interscience.wiley.com/cgi-bin/fulltext/85005217/PDFSTART>
8. “Can Higher Cigarette Taxes Improve Birth Outcomes?”
 By William N. Evans and Jeanne S. Ringel
The Journal of Public Economics, Vol. 72, No. 1, (April, 1999), p.135-154.
 Available at <http://www.sciencedirect.com/science/article/pii/S0047272798000905>
9. “The Impact of Air Pollution on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession,”
 By Kenneth Y. Chay and Michael Greenstore
Quarterly Journal of Economics, Vol. 118, No. 3, (2003), p.1121-1167.
 Available at <http://www.jstor.org/stable/pdfplus/25053932.pdf?acceptTC=true>
10. “The Causal Effect of Studying on Academic Performance,”
 By Todd R. Stinebrickner and Ralph Stinebrickner
The B. E. Journal of Economic Analysis and Policy, Vol. 8, Iss. 1, (Frontiers, 2008), Article 14.
 Available at <http://www.bepress.com/bejeap/vol8/iss1/art14>
11. “Natural and Quasi- Experiments in Economics,”
 By Bruce Meyer
Journal of Business and Economic Statistics, Vol. 13, (April, 1995), p.151-162.
 Available at <http://www.jstor.org.proxy.lib.umich.edu/stable/1392369>
12. “Reforms as Experiments,”
 By Donald E. Campbell
American Psychologist, Vol. 24, No. 4, (April 1969), p.409-429.
 Available at <http://psycnet.apa.org/journals/amp/24/4/409/>
13. Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment,”
 By Esther Duflo
The American Economic Review, Vol. 91, No. 4, (Sept., 2001), p.795-813.

Available at <http://www.jstor.org/stable/2677813>

14. "Empirical Strategies in Labor Economics,"

By Joshua Angrist and Alan Krueger

Handbook of Labor Economics, Vol. 3A, edited by Orley Ashenfelter and David Card,
Amsterdam: Elsevier 401.

Available at <http://www.sciencedirect.com/science/article/pii/S1573446399030047>

Table column size can be adjusted according to the content.