

Economics 590: Applied Micro-Econometrics Syllabus

Fall 2022

Contact Information

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Office Hours: Tuesdays and Thursdays from 11:00 to 13:00 time of Urbana, IL.
To schedule office hours, send me an email with the subject "Econ590 Office Hours."
Always use your official University email account when you communicate with me.

Course Websites

- **Canvas**
 - <https://canvas.illinois.edu>
 - In Canvas, you will find
 - The slides I use in this class and other class material.
 - The homework assignments
 - Grades will be posted in the section "gradebook."

Material

- **Textbook**
 - Angrist & Pischke, *Mastering Metrics*. Princeton University Press.
- **Calculators and Laptops**
 - Basic financial or statistical calculator.
 - The standard calculator is BAII Plus.
 - You should have your calculator in every class.
 - We will be using laptops in some classes.

Course Description

This course will teach you how to use advanced econometric techniques in microeconomic empirical analysis. At the end, you should have the skills to analyze data in order to answer economic questions for a government agency, consulting firm, or similar activity. The emphasis is practical, but many of the lectures will be theory and technique. You must understand these in order to know why a particular estimator is appropriate in some situations, but inappropriate in others.

Pre-requisites and Courses Related

This course assumes that students have knowledge of Calculus, Matrix Algebra, Statistics, and some Econometrics. Students are expected to take Econ 502 and 503 before enrolling in this course.

Grading

The scale used to assign letter grades in the course will be the standard 90/80/70/60 scale with +/- grades given at +/- 3% around these cutoffs. Curves are at the discretion of the Professor. Once grades are assigned by the instructor at the end of the course, no exceptions will be made. We do not round grades. The following table summarizes the standard grading scale:

Final Score	Final Grade
97.00 – 100	A +
93.00 – 96.99	A
90.00 – 92.99	A –
87.00 – 89.99	B +
83.00 – 86.99	B
80.00 – 82.99	B –
77.00 – 79.99	C +
73.00 – 76.99	C
70.00 – 72.99	C –
67.00 – 69.99	D +
63.00 – 66.99	D
60.00 – 62.99	D –

Grade Distribution

Midterm	20%
Final Exam	20%
Homework	20%
Final Project	40%
Brainstorm Presentation	05%
Draft of Project Proposal	05%
Peer Review of Project Proposal	05%
Final Proposal	05%
Final Analysis and Report	20%

Instructional Activities

- **Homework**
 - There are 6 homework assignments. The lowest grade among all your homework assignments will be dropped. Homework assignments that are not turned in will be given a grade of zero.
- **Exams**
 - There will be two exams (one midterm and one final). Calculators will be permitted during exams.
 - **The is no make-up for the midterm exam.** If your absence to the midterm exam is properly documented, the weight of the midterm is transferred to the final exam.

Academic Integrity

Violations of academic integrity as given in the [Code on Campus Affairs](#) will be taken extremely seriously. Students found cheating in the course (or helping others to cheat) will be penalized according to the Code's guidelines.

Course Schedules

Week	Dates	Topic	Date	Assignment
01	08/22 – 08/28	Review of Statistics and Matrix Algebra	09/13	Homework 1 is due.
02	08/29 – 09/04	Causality and Randomized-Controlled Trials	09/27	Homework 2 is due.
03	09/07 – 09/11	Multivariate Regression	10/11	Homework 3 is due.
04	09/12 – 09/18	Multivariate Regression	10/13	Midterm Exam
05	09/19 – 09/25	Common Problems in Data	10/25	Homework 4 is due.
06	09/26 – 10/02	Brainstorm Presentations for Project Topics	11/01	Draft of Project Proposal
07	10/03 – 10/09	Logit and Probit Models and Poisson Regressions	11/10	Peer Review of Project Proposal
08	10/10 – 10/16	Review and Midterm Exam	11/15	Homework 5 is due.
09	10/17 – 10/23	Instrumental Variables	11/17	Final Proposal
10	10/24 – 10/30	Regression Discontinuity Designs	12/06	Homework 6 is due.
11	10/31 – 11/06	Difference-in-Differences	12/12	Final Analysis and Report
12	11/07 – 11/13	The Wages of Schooling		
13	11/14 – 11/20	The Demand for Dietary Staples		
14	11/21 – 11/27	Fall Break		
15	11/28 – 11/30	Bootstrapping and Monte-Carlo Simulations		
16	12/05 – 12/07	Final Review		