

BASIC INFORMATION

COURSE PREREQUISITE(S): ECONOM 9473 or instructor's consent (per [Course Catalog](#))

CLASS MEETINGS: 3:30–4:45pm, Tuesdays and Thursdays, 310 [Middlebush Hall](#)

INSTRUCTOR: Dave Kaplan, 326 [Professional Building](#), office hours 1:30–3:15pm Thursdays (or by appointment, or just stop by and see if I'm in my office), kaplandm@missouri.edu

TEXTS AND MATERIALS: everything you need will be available on my website at <https://faculty.missouri.edu/~kaplandm/personalTeaching.html>, and I plan to provide (free) printed copies of the lectures notes on the second or third day of class.

COURSE WEBSITE: there is a Canvas course website (<https://courses.missouri.edu>). Please let me know immediately if you cannot access it. I will post files and announcements, and you will submit your assignments there. Make sure your settings are such that you get emailed when a new announcement (etc.) is posted. There is also an ECON 9476 calendar in Canvas.

LEARNING OBJECTIVES

The course catalog says about this class, “Equips students with some essential tools for conducting publishable econometric research. Topics at the discretion of the instructor.”

More specifically, I hope you'll be able to do the following.

- For a variety of econometric methods, describe their critical assumptions, computation, and output/interpretation, with some understanding of how these relate.
- Run simulations (in R) to explore how methods perform in practice.
- Interpret results in both statistical and economic terms.
- Extract useful information from econometrics papers/books that you read on your own.
- Judge which of two methods is “better” in a given situation, including in others' research.
- Produce new empirical (or methodological) econometric research, aware of its methodological tradeoffs (accepting that it won't be perfect), able to articulate (defend) how you've successfully extracted new knowledge about the world from the raw data.

If there's more you want to learn, please let me know—that's why I'm here.

TOPICS AND ASSIGNMENTS

Table [1](#) has a list of probable topics; the order/duration of the topics is less certain. I am here for your benefit, so please suggest any additional topic(s) in which you have interest, or your preferences among the listed topics. If we don't cover something in class, I'm happy to discuss it outside of class. Each topic has a corresponding exercise set in the exercise sets PDF file on my website and the course website. You may work together (with your classmates) on exercise sets; see the section on “Academic Integrity” below.

Since we have a mix of students this year, you may choose among the following options. You have to submit four assignments over the semester. At least two of them must be exercise sets; you can pick whichever two most interest you (or fit best with your schedule, etc.). If you are a 3rd-year econ PhD student, then you must do the two short projects (also described in the exercise set PDF), which include in-class presentations around the middle and end of the semester. So, you turn in first ES, first project, second ES, second project (in that order) at the four deadlines during the semester. If you are a 2nd-year econ PhD student, then you are encouraged to do the same (i.e., both projects), but you have the option of replacing a project with another exercise set, in which case you would submit: first ES, second ES, third ES, first project. If you

are any other student, you can do either of the above options or simply do four exercise sets for your four assignments. Grades will be based on these assignments.

Table 1: Possible schedule of possible topics.

#	Classes	Topic(s)
2		Overview & “review”
2		R
1		L ^A T _E X
1		Identification
2		Dynamic Panel Data
5		Quantile Regression
1		Bayesian Bootstrap
2		Presentations
6		Nonparametric Methods: Kernel
2		Distributional Inference
2		Bootstrap and Subsampling
2		Regression Discontinuity
4		Nonparametric Methods: Series/Sieve
2		Presentations (last week of class)

IMPORTANT DATES TO REMEMBER

See the [Academic Calendar](#) and the [Other Academic Calendar](#) (including various deadlines).

ACADEMIC INTEGRITY

As will be the case after you graduate, collaboration and use of whatever books/papers/tutorials you can find is generally permitted (and encouraged) in this class. However, as will be the case after you graduate, integrity is still important. If you use something, cite it, whether a paper, book, person, or URL. If you collaborate with other students, note this. If you’re not sure whether to cite something, err on the side of including too many citations.

Last updated: August 15, 2017

<https://faculty.missouri.edu/~kaplandm/personalTeaching.html>