Basic Information

Course Prerequisite(s): ECONOM 9473 or instructor's consent (per Course Catalog)

Class Meetings: 3:30–4:45pm Mondays and Wednesdays in 212 Middlebush Hall

Instructor: Dave Kaplan, 227 Professional Building, office hours 2–3:15pm Wednesdays (or email me to make an appointment to meet another day/time, 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 Canvas and/or my website at https://faculty.missouri.edu/~kaplandm/personalTeaching.html, and I plan to provide (free) printed copies of the lectures notes at the second or third class meeting.

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 any files and announcements there, 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 a calendar in Canvas for Spring 2020 ECON 9476 that you can see, but I'll try to announce anything I put on the calendar.

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.

You will submit four assignments over the semester. You may choose whichever exercise sets most interest you (or fit best with your schedule, etc.). For example, you could submit an exercise set for each of the first four sections in the lecture notes that we cover, if you know you'll have more work in other classes toward the end of the semester. Alternatively, you may submit 3 exercise sets and 1 research-related project (instead of the 4th ES), along the lines of "Short project #1" in the exercise set PDF document. The project should basically be the research you're pursuing for your field paper, focusing on the econometric part of it (since

that's what I can best help you with). You can also do 2 ES and the 2 short projects. I encourage you to do this option, even if you feel like you haven't really gotten started on research yet (this is a good commitment mechanism/motivation!). Grades will be based on these assignments.

Table 1: Possible schedule of possible topics.

# Classes	Topic(s)
1	Overview & Review
2	LaTeX and Writing
2	R
2	Dynamic Panel Data
5	Quantile Regression
3	Distributional Inference
3	Bootstrap and Subsampling
2	Bayesian Bootstrap
6	Nonparametric Methods: Kernel
4	Nonparametric Methods: Series/Sieve
2	Regression Discontinuity
3	Partial identification
1	Presentations (if any; last 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. The only "exception" is that you must each submit your own ES, i.e., you can't just put multiple names on the same exact write-up. Even with so many resources allowed, 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 their names. If you're not sure whether to cite something, err on the side of including too many citations.

Last updated: January 10, 2020
https://faculty.missouri.edu/~kaplandm/teach.html