1 Basic Information

Instructor David M. Kaplan; I prefer "Dave" but also go by "Professor Kaplan" or "Dr. Dave" or whatever other combination you feel comfortable with.

Online Course Access Canvas, https://canvas.umsystem.edu

Virtual Office Hours Every Tuesday 10–11am and 7–8pm Missouri time (trying to accommodate different work schedules, time zones, etc.), on Zoom:
https://umsystem.zoom.us/j/94763290982?pwd=eWh1UG43S3ViaGYzcENQU0hJc1RoQT09

Help Please post any questions to the appropriate Discussion on Canvas. I plan to respond within 48 hours. Section 5 has details.

Personal Issues For personal issues irrelevant to all other students (e.g., an econometric problem at your job, house burned down, etc.), message me in Canvas (which goes to my email).

Dates/Times Please double-check all submission deadline dates and times. Canvas should display them in your local time zone, but they may seem unusual because they attempt to accommodate students across many time zones. Any dates/times in the syllabus or announcements refer to local time in Columbia, Missouri (you can Google "Missouri time").

Course Prerequisites This course builds upon fundamental concepts like random variables, probability distributions, estimation, and confidence intervals. That said, Chapters 2 and 3 provide some review of such concepts. (I do not require calculus or linear algebra.)

2 Textbook, Other Resources, and Software

Textbook and Videos I developed the textbook *Introductory Econometrics: Description, Prediction, and Causality* specifically for Mizzou students. Optional videos are in this playlist https://www.youtube.com/playlist?list=PLC9djFuhVkt6ye3LK_Wet8DCHaizNPsmI and linked throughout the textbook. For textbook access:

- Digital: https://kaplandm.github.io/teach.html
- Print: https://www.themizzoustore.com/p-236916-introductory-econometrics-description-prediction-and-causality.aspx

The soft-cover print version is currently $12.95 ($0.04/page; I do not receive any payment).

Other Resources Additional good, free educational resources are linked at the beginning of each textbook chapter. Like the videos, these are all optional.

Software You will use statistical software. R is recommended; Stata is also allowed; see Chapter 1. ("Stata/IC" is fine.) If your job requires something else (SAS, etc.), please ask ASAP.

Software Accessibility and Privacy Certain accessibility standards may not be met by R and/or RStudio. There is an archived BrailleR package for blind users, but it is not actively supported. For help, please contact our Disability Services team (click the "Students with Disabilities" link in the

"Support & Policies" tab in Canvas). Stata has an accessibility statement. There is a Privacy Policy for RStudio and privacy policy for Stata.

Textbook Accessibility and Privacy No data of yours is collected when you view the textbook (it's just a PDF file). Please let me know if you have accessibility issues, and I will work with you to find a solution.

3 Course Description and Goals (Learning Objectives)

You will be introduced to fundamental concepts and methods in econometrics, for description, prediction, and causality. The goal is to develop your practical ability to understand, critique, and conduct empirical econometric analysis. Mathematical models aid deeper, more precise understanding of practical issues. Specific methods include many variations on regression, as well as forecasting and quantifying uncertainty. The empirical exercises offer you practice writing code for such methods.

The learning objectives for this class are listed as the Textbook Learning Objectives (TLOs) in the textbook. By the end of the semester, you will be able to do everything listed in the TLOs.

4 Schedule and Assessments

(See also Section 9, "Grading Criteria")

Schedule and Deadlines Each week of the semester has its own Module in Canvas. This describes the learning materials and assessments for that week, with links to the corresponding Discussions and assessments. You can see the submission deadline and other details for each assessment by clicking on it in Canvas.

Assessment: Exercise Sets Each *exercise set (ES)* is a set of multiple choice questions you complete in Canvas. You may discuss ES questions with other students (and me), but you must submit your own. After you submit, you'll be able to see your score but not which question(s) you got correct. If you are not satisfied with your score, then you may try again (up to the maximum number of attempts shown in Canvas); only your most recent score will count toward your grade. For example, if you first score 5, then 5 again, then 7, then finally 8, your score on the ES is 8, the most recent score. However, "most recent" is not necessarily "highest"; for example, if you first score 8, but don't know which you got wrong (you just had several lucky guesses), then you might next score 7; if you don't submit anything else before the deadline, then your official ES score is 7 (most recent), not 8 (highest). Soon after the submission deadline, you'll be able to see not only your score, but also your responses along with whether they were correct or not. Because of this, late submissions receive zero credit. (You will not automatically see the correct response if yours was incorrect, but you're welcome to ask on the discussion board about ES questions you can't figure out on your own.)

Assessment: Empirical Exercises Each *empirical exercise (EE)* consists of writing and running R code (or Stata code), following relatively explicit instructions. The different EE options are at the end of each chapter in the textbook. You submit these through Canvas, where there are further submission details and scoring rubrics. Because most students are new to statistical software, empirical exercises are essentially scored on effort. (If you find the EE too easy, you can try some of the "optional" steps at the end, but there is no extra credit.) You may discuss EE steps with other students (and me), but you must submit your own, including both your code and the results/output.

Assessment: Exams Each *exam* is in Canvas and multiple choice, very similar to an ES (in both structure and content; e.g., no coding questions), but with more questions and restricted time (see Canvas for details). The instructions say, "You may use any materials you want: eBook, textbook, Wikipedia, notes, etc. But, you may not consult with any other person (whether in person, by text, email, etc.). There is no penalty for guessing." Although there is technically a time limit, almost all students submit exams before the limit, often an hour or more before. The first midterm exam covers chapters/weeks 2–4; the second midterm covers chapters/weeks 6–10; and the final exam is cumulative (covering chapters/weeks 2–15).

Assessment: Discussion Questions Each (non-exam) textbook chapter also has *discussion questions (DQs)* throughout the chapter. In Canvas, you respond to one of them (your choice), and you can then optionally read and reply to other students' responses. Your score is entirely based on participation, i.e., did you submit a response (that addresses the DQ) or not? (If the question is, "Explain why you think method A or method B is better in this case," then "I think B" does not count as a response because it does not even attempt to respond to the prompt.) You may discuss DQs with other students, but you must submit your own.

Assignment Credit Not every assignment is mandatory. You may choose to submit any 9 ESs, any 5 EEs, and any 8 DQs. More specifically, your lowest ES, EE, and DQ scores will be dropped, so only your best scores count. This is intended to account for any illness or emergency (work, family, etc.) that prevents you from doing that week's assignments; that's fine, they'll just get dropped automatically, with no need to document them or notify me. You may also skip a week of assignments for more frivolous reasons, although to get the most out of this course, you may still wish to do as many ESs, EEs, and DQs as you can.

5 Discussion Boards

5.1 Discussion Boards Structure: Where to Post What?

There are different Discussions for different types of posts.

"Logistical/administrative questions" is for your questions like, "is the running Total Grade Estimate in Canvas a reliable measure?" Often the answer is in the syllabus or can be seen in Canvas, so please check first.

"Chapter X: your questions (optional)" is for your questions about the material in Chapter X (1, 2, 3, . . .). You are encouraged to ask questions here when working through the assignments (Exercise