

1 Basic Information

Course Prerequisite(s) ECONOM 9472 or instructor’s consent

Class Meetings Tuesdays and Thursdays 12:30–1:45pm, E204A [Locust Street Building](#); except January 24 & 31 (both Tuesdays) will be in [Middlebush Hall](#) room 7 (computer lab in basement) to use Stata

Instructor [David M. Kaplan](#) (I prefer “Dave” but also go by “Professor Kaplan” or “Dr. Dave” or whatever other combination you feel comfortable with), E221 [Locust Street Building](#), office hours Wednesdays 10:30–11:30am or by appointment (email me), kaplandm@missouri.edu

Texts and Materials The main text is *Econometric Analysis of Cross Section and Panel Data* (2nd ed.) by Jeffrey [Wooldridge](#) (2010). While the content is good, unfortunately the physical binding deteriorates relatively rapidly, so beware that sections of pages may start coming loose if you get a used copy. The Wooldridge website (with datasets and such) is <https://mitpress.mit.edu/books/econometric-analysis-cross-section-and-panel-data>; datasets can also be loaded “automatically” through Stata (see assignments for details). I will also sometimes refer to my *Introductory Econometrics: Description, Prediction, and Causality* textbook ([Kaplan, 2022](#)); my website (<https://kaplandm.github.io/teach.html>) has links to the free digital PDF as well as a \$12.95 print version (\$0.04/page) from Mizzou Publishing. Optional (will not be used/referenced at all): a more comprehensive but perhaps less accessible tome on microeconomic methods is *Microeconomics: Methods and Applications* by Cameron and Trivedi.

Software Stata can be used in the on-campus computer labs listed at <https://doit.missouri.edu/services/computing-sites/sites-software/>, which currently includes the basement computer lab in room 7 of [Middlebush Hall](#). Stata can also be used from home via Mizzou’s [Software Anywhere](#), just make sure to save your work (to your own computer or email) frequently to avoid losing progress.

Course Website There will be a Canvas course website (<https://canvas.umsystem.edu/>). I’ll mostly just post announcements (if necessary) and assignments. Make sure your settings are such that you get emailed when a new announcement (etc.) is posted. If you cannot access the Canvas site, please let me know ASAP.

2 Learning objectives

The course catalog says about this class, “Analysis of nonlinear regression models and other essential econometric tools not covered in ECONOM 9472 from an advanced statistical perspective.”

More specifically, I hope you’ll be able to

- Define terms and concepts, both mathematically and intuitively.
- Develop intuition for fundamental concepts to enable you to understand econometrics papers/books that you need to read later for your own research.
- Describe various econometric methods both mathematically and intuitively, including their objects of interest and assumptions, and the logical relationship between the assumptions and

corresponding theorems and properties.

- For a given economic question, dataset, and econometric method, judge whether the method is appropriate and assess the economic significance and statistical significance of the results.
- Use Stata to manipulate and analyze data, interpreting results both economically and statistically.

3 Classes

Generally, each class follows the same structure.

1. First, you may ask any questions about the textbook material (including, “Could you please explain the part about ___?”).
2. Second, I will alternate presenting material / lecturing with Discussion Questions (DQs). You first discuss the DQ with somebody sitting near you; then you share your (or your partner’s!) ideas with the full class.
3. Third, there is usually (hopefully?) time to ask additional questions at the end.

Before each class, I expect you to prepare enough to participate in class. For some of you, it may be sufficient to simply show up and listen carefully, without any pre-class preparation. For others, you may find you need to peek ahead in the textbook to understand enough to participate in the DQs, or even to realize what you don’t understand enough to ask a question about it.

Table 1 shows the schedule of class topics.

4 Schedule of Topics and Assignments

See Table 1 for the schedule of topics/chapters and exams. There will be four exercise sets total, one per part, in addition to the two exams. We will *not* cover all of each chapter listed, but rather only a subset of the sections; you are only responsible for the sections covered in class.

Table 1: Order of topics and exams.

Part	Topic	Chapter	
		Wooldridge (2010)	Kaplan (2022)
1	Fundamentals	1, 2, 4, 21	2–4, 6, 7, 9, 10
1	Stata	Class in Middlebush 7 on Jan. 24 & 31 (Thursdays)	
2	IV and GMM	5, 8, 14, 21	n/a
1–2	Midterm exam	In class, date TBD	
3	Panel data	10	n/a
4	Probit	13, 15	n/a
1–4	Final exam	10am–12pm May 12 in E204A	

5 Grading Criteria

Plus/minus grading is used in this course, and the final exam is mandatory. Relative weighting of assignments, participation, and exams is shown in Table 2.

Table 2: Relative weighting of assignments.

Assignment	Percent of total
Participation	10
ES #1	10
ES #2	10
Midterm exam	25
ES #3	10
ES #4	10
Final exam	25
Total	100

Participation is graded by effort. Whether you say something “right” or “smart” is irrelevant. In fact, this is a good opportunity to get comfortable with being wrong and feeling dumb, which will aid your later transition from classwork to research. (I do expect that after a few years of research you’ll be an expert on your dissertation topic, but I have no such expectations now.) If you make a “good faith” (sincere) effort to participate in every class meeting, then you’ll get 100% for this component of your grade. This includes both asking questions at the beginning of class and participating in the Discussion Questions. If you are always confused and never have “answers” but ask your very basic questions, that counts just as fully as if you’re never confused and never have questions but always respond to the in-class discussion questions.

On exams, you will be allowed to use the textbook, your notes, and any other printed materials, but you may not have any electronics (laptop, phone, etc.). You may discuss exercise sets with your classmates, but you must turn in your own work. As in research, always cite your sources, whether the textbook, a classmate, something online, etc.; see the Academic Integrity section below.

Letter grades will be mapped in the usual way, i.e., A range is 90–100%, B range 80–89.99%, C 70–79.99%, F below that. Any “curve,” if it seems appropriate, will *not* enforce predetermined grade *proportions* but rather move everyone up together; that is, you are not competing with the student next to you for a fixed number of A grades.

6 Penalties for Late Work

Assignments turned in late but before the beginning of the next class will receive half the points earned. After the beginning of the next class, no credit will be given, though I am happy to still give feedback on the work if you turn it in (to help you learn).

You are expected to take the exams at the scheduled times. In case of an emergency such as serious injury/illness, you must contact me immediately (i.e., before the exam) to request a makeup. (It

doesn't matter whether or not I read your email before the exam, just that you sent it before.) If you miss (and don't make up) the midterm or final, then you will receive an "incomplete" for your semester grade.

7 Grading Questions

Graded work will be returned toward the end of class. You will have the rest of class time to review the comments and ask questions. If you think something in the scoring is amiss (points added incorrectly, logic misunderstood, etc.), then just let me know and leave the work with me to review. If it is a non-trivial question, I may review the work in its entirety and adjust other parts up or down if there are other inconsistencies with the grading rubric. Otherwise, after leaving the classroom with your work, you may still ask me questions about it, but the recorded grade will not be changed.

8 Academic Integrity

As will be the case after you graduate, collaboration and use of whatever books/papers/tutorials you can find will be generally permitted in this class, except as noted for exams. 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 at the top of your ES. If you're not sure whether to cite something, err on the side of including too many citations.

Below are more formal statements about academic integrity, which you may have already read on another syllabus.

Academic integrity is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards breaches of the academic integrity rules as extremely serious matters.

Link: [Standard of Conduct for Academic Integrity](#)

In addition, you are expected to adhere to the following honor pledge on all graded work, whether or not explicitly asked in advance to do so: "I strive to uphold the University values of respect, responsibility, discovery, and excellence. On my honor, I pledge that I have neither given nor received unauthorized assistance on this work."

Further details on academic integrity are in Canvas: in "Support & Policies," under "MU Policies & Expectations," please read "Academic Integrity."

9 Other Policies

These are mostly standard policies provided by the University; you may have already seen the exact same statements on the syllabus for other classes. That said, they are still helpful to be aware of.

9.1 Mental Health

Personal note: it is very common for Economics PhD students to have depression and anxiety.¹ For your long-term PhD success, it is equally important to spend time working on your mental (and physical) health as on your academic work. One perk of being a student is the availability of many free/low-cost mental health resources (see below).

The University of Missouri is committed to supporting student well-being through an integrated network of care, with a wide range of services to help students succeed. The MU Counseling Center offers professional mental health care, and can help you find the best approach to treatment based on your needs. Call to make an appointment at 573-882-6601. Any student in crisis may call or go to the MU Counseling Center between 8am–5pm Monday through Friday. After hours phone support is available at 573-882-6601. Visit our website at <https://wellbeing.missouri.edu/> to take an online mental health screening, find out about workshops and resources that can help you thrive, or learn how to support a friend. Download Sanvello, a phone app that teaches skills and strategies to help you maintain good mental health. Log in with your Mizzou email to unlock all the tools available through Sanvello at no additional cost to you.

9.2 Students with Disabilities

If you anticipate barriers related to the format or requirements of this course, if you have emergency medical information to share with me, or if you need to make arrangements in case the building must be evacuated, please let me know as soon as possible.

If disability-related accommodations are necessary (for example, a note-taker, extended time on exams, captioning), please establish an accommodation plan with the [MU Disability Center](#) (S5 Memorial Union, 573-882-4696) and then notify me of your eligibility for reasonable accommodations. For other MU resources for persons with disabilities, click on “Disability Resources” on the MU homepage, or click on “Students with Disabilities” in Canvas in “Support & Policies” under “MU Policies & Expectations.”

9.3 Acceptable Use

The University of Missouri’s Acceptable Use Policy (AUP) for information technology applies to Mizzou websites. The AUP addresses federal and state laws, university regulations, intellectual-property rights, software-licensing requirements, and prohibitions against plagiarism and obscenity. This policy applies to all users including faculty, staff, students, and guest users of University of Missouri computer networks, equipment, or connecting resources.

Link: [UM System Acceptable Use Policy](#)

9.4 Copyright

This section helps you understand copyright in course materials, student work and pages published on Mizzou websites.

¹<https://www.aeaweb.org/articles?id=10.1257/jel.20201555>

Link: [UM System Copyright Information](#)

9.5 Executive Order No. 38

When you record something that happens in a course (a lecture, class discussions, meetings, etc.), it has an impact on the rights of the people captured in that recording. For example, your instructor and the University may have rights to the intellectual property contained in that recording. At the same time, another student who may have been recorded has the right to privacy. In order to protect these rights, MU employs a policy (called “Executive Order No. 38”) to govern both situations you may encounter while taking a course, i.e., when your instructor does or does not allow recordings.

Link: [Executive Order No. 38](#)

9.6 FERPA

The University of Missouri maintains educational records of students in accordance with the Family Educational Rights and Privacy Act of 1974 (FERPA). Related topics include privacy policies at MU, display of student directory information, and details about how MU manages FERPA-protected information.

Link: [Family Educational Rights and Privacy Act \(FERPA\)](#)

9.7 Intellectual Pluralism

The University community welcomes intellectual diversity and respects student rights. Students who have questions or concerns regarding the atmosphere in this class (including respect for diverse opinions) may contact the departmental chair or divisional director, the director of the Office of Students Rights and Responsibilities, or the MU Office of Institutional Equity.

Link: [Statement on Intellectual Pluralism](#)

9.8 Statement of Nondiscrimination

The University of Missouri does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, age, genetics information, disability, or status as a protected veteran.

Link: [MU Statement of Nondiscrimination](#)

If you experience discrimination or sexual violence, you are encouraged (but not required) to report the incident to the MU Office of Institutional Equity. Learn more about your rights and options at the [Office of Institutional Equity](#) or by calling 573-882-3880. You also may make an anonymous report online.

If you are a survivor, or someone concerned about a survivor, and need immediate information on what to do, see [RSVP resources page](#). Both the Office of Institutional Equity and the RSVP Center can provide assistance to students who need help with academics, housing, or other issues.

Note: (almost) all Mizzou employees are “mandated reporters,” meaning that if you choose to write or speak with me about having experienced any of these forms of prohibited discrimination or harassment, [Mizzou policies require](#) that I share this information with the MU Office of Institutional Equity. They will contact you to offer information about resources, as well as your rights and options as a member of our campus community.

9.9 Religious Holidays & Accommodations

Many religious faiths are represented in the student body. The University of Missouri does not restrict student free exercise of religion, unless 1) the restriction is in the form of a rule of general applicability, and does not discriminate against religion or among religions; and 2) it can be demonstrated that the application of the restriction is essential to furthering a compelling university interest, and is not unduly restrictive considering the relevant circumstance. The policy of the University attempts to strike a reasonable balance between accommodating the religious practice of students and meeting academic needs and standard. Consult IDE’s Guide to Religions for the form that can be used to notify an instructor of an absence associated with religious practice. Students are expected to notify their instructor(s) by completing and submitting this form in a manner that is consistent with the procedure outlined in the university’s policy on student religious accommodation. Providing false information regarding sincerely held religious practice is a violation of the university’s Standard of Conduct and will not be tolerated.

References

- Kaplan, David M. 2022. *Introductory Econometrics: Description, Prediction, and Causality*. Columbia, MO: Mizzou Publishing, 3rd ed. URL <https://www.themizzoustore.com/p-236916-introductory-econometrics-description-prediction-and-causality.aspx>.
- Wooldridge, Jeffrey M. 2010. *Econometric Analysis of Cross Section and Panel Data*. MIT Press, 2nd ed. URL <https://www.worldcat.org/oclc/831625495>.