

Syllabus: Econ 9476 (Advanced Topics in Econometrics I)

Wednesdays 5:00-7:45pm Middlebush 206

Instructor

Yu-Chin Hsu
E-mail: hsuy@missouri.edu
Office: Professional 318
Office hours: Wed, 2pm-4pm.

Objectives

This course will focus upon econometric models for panel data and treatment effects. For panel data we will cover linear models, non-linear models, models with “dynamics,” and various other topics as time permits. For treatment effect models, we will cover some recent development in this area. The course will be largely lecture-based with student presentations occurring throughout the semester.

Textbook

The required textbook for this course is *Econometric Analysis of Cross-Section and Panel Data* 2nd edition, by Jeffrey Wooldridge.

Prerequisites

It is required that students have taken 9473 Econometric Methods II. In particular, I will assume that students are familiar with and have a working knowledge of Chapters 3-7 and 12-14 of the required textbook. I will make exceptions in special cases.

Website (Blackboard)

All course materials, homework assignments, and datasets will be posted on my website at <http://yuchinhsu.yolasite.com/>.

Grading

There will be no in-class exams for this course. Your course grade will be broken down as follows:

Problem sets	20%
In-class presentation	30%

Final project (due on the last official meeting day) 50%

I will use the grading system **without plus-minus** and I do not take attendance.

Homework

There will be two or three assignments issued on Wednesdays which are due at the **end** of the following Wednesday's classes. **NO late problem sets are accepted.** Assignments must be turned in on paper. The problem sets will be a combination of theoretical and empirical exercises. For the empirical exercises, you should use a "non-canned" econometrics package such as Gauss, Matlab, or Ox in order to carry out any necessary estimation. You may work with one other person on the problem sets; if you work in a team of two, please turn in only one copy of your work.

Final project

Each student should submit a final project which is due at the **end** of the on the last official meeting day. **NO late projects are accepted.** Each student can find his/her own data set or can use the data set I assign in class. In the project, each student should find an "interesting" and well-defined empirical question and use the panel data technique or treatment effect technique to answer. If you want to a final project on theoretical topics, you must talk to me in advance. More information to come.

In-class presentation

Depending on the size of the class, each student will have two or three 30-45 minute presentations during class sessions. Each student should present a well defined and "interesting" empirical question and the econometric method he/she uses to answer the question in one of the presentations. Before the semester ends, each student present the results he/she obtains in one of the presentations. You are certainly welcome to provide handouts to the class. I am happy to have copies made for you if they are provided to me ahead of time. More information to come.

Course outline (topics near end to be covered as time permits; "W" = Wooldridge chapters):

1. Review of Basic Asymptotic Theory (W 3)
2. Estimating Systems of Equations by OLS and GLS (W 7)
3. Basic Linear Unobserved Effects Panel Data Models (W 10)
4. Discrete Response Models (W 15)
5. Estimating Average Treatment Effects (W 21) and some papers.
6. Selected topics from W 15-20 will be covered if time permits
7. In addition to these book chapters, I will provide some papers along the way.

Statement on Academic Dishonesty:

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. Sanctions for such a breach may include academic sanctions from the instructor, including failing the course for any violation, to disciplinary sanctions ranging from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, collaboration, or any other form of cheating, consult the course instructor.

Statement on Disabilities:

If you need accommodations because of a disability, if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please inform me immediately. Please see me privately after class, or at my office. To request academic accommodations (for example, a notetaker), students must also register with the Office of Disability Services, (<http://disabilityservices.missouri.edu>), S5 Memorial Union, 882-4696. It is the campus office responsible for reviewing documentation provided by students requesting academic accommodations, and for accommodations planning in cooperation with students and instructors, as needed and consistent with course requirements. For other MU resources for students with disabilities, click on "Disability Resources" on the MU homepage.

Statement on Intellectual Pluralism:

The University community welcomes intellectual diversity and respects student rights. Students who have questions concerning the quality of instruction in this class may address concerns to either the Departmental Chair or Divisional leader or Director of the Office of Students Rights and Responsibilities (<http://osrr.missouri.edu/>). All students will have the opportunity to submit an anonymous evaluation of the instructor at the end of the course.