ECON 482: Econometric Theory and Practice (Spring 2022)

Instructor: Professor Jing Tao

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Class Webpage: Course materials will be posted at Canvas.

Course Time: Tuesday and Thursday 10:30 AM-12:20 PM, SMI 313

Instructor Office Hours: Thursday 8:30 AM-10:20 AM, SAV 336

Questions should mostly go to lecture time or office hours. Otherwise, emails will be responded to within two business days.

Textbook:

Required Text: Wooldridge, Jeffrey M., Introductory Econometrics: A Modern Approach, South- Western College Publishing, 7th edition. The 6th edition or the 5th edition is acceptable. Check with classmates to make sure that you are doing the right problem set questions if you use some other editions.

Course Overview:

This course aims to help students understand how to interpret economic data. It will focus on the issues that arise in using this type of data, and the methodology for solving these problems. The focus of the course is on regression analysis. Specific topics and extensions will include multivariate regression, dummy variables (including limited dependent variables), heteroskedasticity, and endogeneity. Problem sets will provide practical experience in addressing some of these issues using actual economic data. I will follow the textbook closely.

Tentative Topics to Be Covered:

- 1. Introduction to simple regression (Chapter 2)
- 2. Multivariate Regression: Estimation and Inference (Chapter 3-5)
- 3. Multivariate Regression: Further Issues (Chapter 6)
- 4. Binary or Dummy Variables (Chapter 7)

- 5. Heteroskedasiticy (Chapter 8)
- 6. Endogeneity and Instrumental Variables (Chapter 15)

Requirements:

- 1. Problem sets (25%).
- 2. Three exams (25% each)

Softwares

- 1. You can buy Stata here (https://itconnect.uw.edu/wares/uware/)Links to an external site. You can buy "Stata/IC" (the cheapest version.) Of course you can buy more expensive version but not necessary for this course.
- 2. If you are familiar with 'remote access', there is a way to use Stata free of charge. Go to this link

(https://csde.washington.edu/computing/resources/#TS_Connecting) (Links to an external site.) and follow the instructions under "Remote Access Windows Computing (Terminal Servers)" carefully for setting up the remote desktop. If it doesn't work for you, you may have to use the first option (buying the Stata program)

A good reference is:

https://data.princeton.edu/stata/

3. R (r-project.org) and RStudio (rstudio.com) are available for free and will be used throughout the course. R Markdown is recommended. A good reference is:

Heiss, Florian, Using R for Introductory Econometrics, 2nd edition. It can be read online for free here:

http://www.urfie.net/

Key Dates:

- 1. Problem sets are due before class time of the due date. NO late problem sets are accepted.
- 2. The three exams are scheduled on **April 21** (Thursday), **May 17** (Tuesday) and **June 2** (Thursday).
- 3. Students are responsible for announcements made via Canvas and emails.

4. As a general rule, I do not give make-up exams. However, if there are exceptional circumstances that make it impossible for you to take an exam at the scheduled time you should contact me at least five days BEFORE the exam.

Read "Department Policy on Academic Conduct" from the department webpage.

Academic integrity is the cornerstone of the Department's rules for student conduct and evaluation of student learning. Students accused of academic misconduct will be referred directly to the Office of Community Standards and Student Conduct for disciplinary action pursuant to the Student Conduct Code and, if found guilty, will be subject to sanctions. Sanctions range from a disciplinary warning to academic probation to immediate dismissal for the Department and the University, depending on the seriousness of the misconduct. Dismissal can be and has been, applied even for first offenses. Moreover, the instructor for the course can assign a grade of zero.

Accommodations:

Should you require disability accommodations, please contact Disability Resources for Students at http://depts.washington.edu/uwdrs/ or 206-543-8924.

Washington state law requires that UW develop a policy for the accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form.