ECON 482: Econometric Theory and Practice Spring 2020

Instructor: Jing Tao E-mail: jingtao@uw.edu

Class Webpage: Course materials will be posted at Canvas.

Course Time: Mondays and Wednesdays 12:30-2:20PM on Zoom (Meeting ID: 347-549-7852).

Instructor Office Hours: Mondays and Wednesdays 2:30PM-3:30PM on Zoom (Meeting ID: 347-549-7852).

Questions should mostly go to after lecture or office hour. Otherwise, emails will be responded within **2** business days.

Textbook:

Required Text: Wooldridge, Jeffrey M., Introductory Econometrics: A Modern Approach, South- Western College Publishing, 6th edition. The 4th 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. https://www.cengage.com/c/introductory-econometrics-a-modern-approach-5e-wooldridge/9781111531041PF/

You should be eligible to free Cengage unlimited access to the ebook. <u>https://www.cengage.com/covid-19-support/</u>

Course Overview:

The purpose of this course is 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)

Statistical Software:

The computer program R will be used extensively in the course. If you do not yet have R on your laptop please download it and install it from this site:

https://www.r-project.org (Links to an external site.)

Also make sure to install Rstudio:

https://www.rstudio.com/products/RStudio/ (Links to an external site.)

If you do not know how to program in R or need to up your skills, here are some useful resources, many more are available on line through a Google search:

https://cran.r-project.org/doc/manuals/r-release/R-intro.pdf (Links to an external site.) https://cran.r-project.org/doc/contrib/Paradis-rdebuts_en.pdf (Links to an

<u>external site.)</u>

Here are scripting guidelines:

http://jef.works/R-style-guide/ (Links to an external site.)

Requirements:

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

Key Dates:

1. Problem sets are due before class time of the due date. NO late problem sets are accepted.

2. The three online exams/projects are scheduled on April 22 (Wednesday) and May 20 (Wednesday) and June 3 (Wednesday).

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 BEFORE the exam.

Read "Department Policy on Academic Conduct" from 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.