# ECON 482 B Econometric Theory and Practice

<u>Instructor:</u> Jing Tao E-mail: <u>jingtao@uw.edu</u>

Class Webpage: Course materials will be posted at Canvas. Course Time: Tuesday and Thursday 3:30-5:20PM, SAV 132 Instructor Office Hours: Thursday 1:30-3:30PM, SAV 336

#### **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.

#### **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)

## STATA & R:

The computer programs STATA and R will be used extensively in the course. One reasonably good introduction is <a href="http://data.princeton.edu/stata/">http://data.princeton.edu/stata/</a> for STATA and <a href="https://cran.r-project.org/doc/contrib/Paradis-rdebuts\_en.pdf">https://cran.r-project.org/doc/contrib/Paradis-rdebuts\_en.pdf</a> for R. I will do some STATA&R demonstration in class. BUT do not expect me to give you

command by command instruction to your problem sets before they are turned in.

## **Requirements:**

- 1. Problem sets (10%).
- 2. Three exams (each 30%).

#### **Key Dates:**

- 1. Problem sets are due before class time of the due date. NO late problem sets are accepted.
- 2. The mid-term exams are scheduled on Oct 23 (Tuesday) and Nov 20 (Tuesday).
- 3. The last exam is scheduled on Thursday, December 6.
- 4. Students are responsible for announcements made in class and via Canvas.
- 5. 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.