

**Econometric Theory and Practice (Econ 482)**  
**Winter 2024, University of Washington**

**Instructor:** Chang-Jin Kim (Savery Hall 353)

**Class Hours:** T, Th. 10:30AM - 12:20PM (Miller Hall 316)

**Office Hours:** T, Th 3:00-3:50pm

**Useful Textbook:**

**\*\* Introductory Econometrics**, by Jeffrey M. Wooldridge.

**Prerequisites:** Minimum grade of 2.0 in ECON 300, either ECON 311/STAT 311, MATH 390/STAT 390, or Q SCI 381.

### **Course Description**

This course deals with theory and applications of statistical modeling to empirical work in economics; Focuses on regression analysis; derivations of regression estimators and their properties; and applied computer work in estimating multiple regression models.

### **Grades:**

Grades will be assigned on the basis of your performance on two midterm exams (**Jan. 25 (Thursday) and Feb. 15 (Thursday)**) (about 40%); final exam (**March 11, (Mon)**) (about 50%) and a series of assignments (about 10%).

**Computer Software:** R-programming language

### **Course Outline:**

\* Review of Basic Statistical Concepts

Random Experiment, Sample Space, Random Variable, Population, Sample

\* The Principle of the Ordinary Least Squares Method

\* The Principle of Hypothesis Testing

\* Multiple Regression Analysis

Model set up and estimation

Hypothesis testing

\* Generalized Least Squares (GLS)

Heteroscedasticity  
Autocorrelation

\* IV (Instrumental Variables) Estimation

**POLICY**

1. No make-up examinations
2. No questions using email