**Econometrics**

Winter 2022
Instructor: 林熙榕
Office: School of Economics Building 106
Office Hours: by appointment via Zoom
Email: linxirong@mail.shufe.edu.cn
Teaching Assistant: 许可欣
Email: 1390119352@qq.com

**Textbook**
Required: James H. Stock / Mark W. Watson, *Introduction to Econometrics* (2nd edition)

You can buy a photo-print version from the following domestic publisher: http://www.spph.com.cn/books/bookspec/view.asp?id=0202010000961282

**Prerequisites**
This course is a theoretical class in econometrics. I will assume that you fully understand the fundamentals learned in probability and statistics. This course is analytic in nature. Calculus is required for you to follow the lectures and do the homework.

**Course Objectives**
This course is designed to teach you the basics of the theory and practice of econometrics. This course will be primarily focused on the linear regression models. We will study how to estimate and conduct statistical inference on linear models, and how to interpret the results to help us answer practical questions.

**Grading**
There will be one midterm exam, one final exam, a number of homework assignments, and some random in-class quizzes. Grades will be determined as follows:

Quizzes 20%
Homework 40%
Midterm 15%
Final Exam 25%
At random points during the semester, I will give quizzes (5-10 minutes each) at the beginning or at the end of the class.

The homework assignments include all the review questions corresponding to the chapters that we cover in the lectures. You may discuss questions about the homework with other students, but you must do your own work and turn in separate assignments. Homework assignments must be turned in at the beginning of class on the due date indicated on the assignment. You may turn in a homework assignment one day late and receive a penalty of 10%; however, homework assignments more than one day late will not be accepted and will receive a grade of 0.

**Make-up Policy**

Missing a midterm or quiz must be approved by the instructor prior to the exam or quiz, or you must provide written proof of any (medical) emergency to the instructor within SEVENTY-TWO hours after the exam or quiz. There will be no make-up midterm or quizzes. In lieu of make-up midterm or quizzes, weight from excused midterm or quizzes will be added to the final exam.

**Academic Integrity**
The SUFE University Academic Integrity Policy will apply. The policy is available at http://jwc.shufe.edu.cn/Detail.aspx?ID=967&TypeID=5.

**Course Schedule (subject to change)**
Below is a rough outline for the course. This schedule may be adjusted as the course progresses. The midterm covers Lectures 1-6, but the final exam will be cumulative (i.e. will cover Lectures 1-12).

| | |
|---|---|
| Lecture 1 | Review probability and statistics |
| Lecture 2 | Linear regression with one regressor |
| Lecture 3 | Linear regression with multiple regressors |
| Lecture 4 | Accessing studies based on linear regression |
| Lecture 5 | **Midterm** |
| Lecture 6 | Introduction to software STATA |
| Lecture 7 | Regression with panel data |
| Lecture 8 | Linear regression model with endogeneity |
| Lecture 9 | Maximum likelihood estimation of linear regression |
| Lecture 10 | Discrete response model: binary and multinomial regressions |
| | 习题课 |
| | **Final exam** |