



EC310 Introduction to Econometrics

Instructor Information	<p>Jia Ren Home Institution: Shanghai University of International Business and Economics Email: j.ren@suibe.edu.cn Office Hours: Determined by Instructor</p>		
Term	December 13, 2021 - January 7, 2022	Credits	4 units
Class Hours	Monday through Friday, 120 mins per teaching day		
Total Contact Hours	66 contact hours (1 contact hour = 45 mins, 3000 mins in total)		
Required Texts (with ISBN)	<p>Jeffrey M. Wooldridge (2019), <i>Introductory Econometrics: A Modern Approach</i>, 7th Edition, Cengage ISBN-10: 1-337-55886-9 ISBN-13: 978-1-337-55886-0</p> <p>Peter Kennedy(2008), <i>A Guide to Econometrics</i>, 6th Edition, Wiley-Blackwell ISBN: 978-1-405-18257-7</p>		
Prerequisite	Students are expected to have a thorough knowledge of mathematics in an introductory finance course.		



Course Overview

In this course, an introduction to Econometrics used in empirical finance will be launched. The topics will be presented in both econometric theory and applications. The first part of course will have a general introduction of Econometrics and its application. The following sessions cover simple regression and multiple regression. After the basic regression, further specific issue will be covered as dummy variable and Heteroskedasticity. Because many of the assumptions underlying the theorem will be violated in applications, the consequences and remedies will be covered. Along the way, different estimation procedure and statistical inference are be discussed in detail. The last part is time-series session, which focus on the basic solutions and issue.

Learning Outcomes

After successfully completing this course you should be able to:

1. understand the basic concepts of econometrics and understand the status of econometrics as an economic discipline in economics
2. understand the basic concepts of econometric models and related model knowledge theories and methods of identification and testing
3. learn to use econometric models to solve practical problems
4. familiar with the basic content and working procedures of econometric analysis
5. lay a solid foundation for learning higher-level econometrics and economics courses

Grading Policy

Mid-semester Exam	30%
Group Project	20%
Final Exam	50%

Grading Scale is as follows

Number grade	Letter grade	GP A
90-100	A	4.0
85-89	A-	3.7
80-84	B+	3.3
75-79	B	3.0
70-74	B-	2.7
67-69	C+	2.3
65-66	C	2.0
62-64	C-	1.7
60-61	D	1.0
≤59	F (Failure)	0



Class Schedule

Date	Lecture	Readings
Day 1	The Nature of Econometrics and Economic Data	Chapters 1
Day 2	The Simple Regression Model(I)	Chapter 2
Day 3	The Simple Regression Model(II)	Chapter 2
Day 4	Practice session on “Simple Regression”	Tutorial questions and supporting material
Day 5	Multiple Regression Analysis: Estimation	Chapter 3
Day 6	Multiple Regression Analysis: Inference	Chapter 4
Day 7	Multiple Regression Analysis: OLS Asymptotics	Chapter 5
Day 8	Multiple Regression Analysis: Further Issues	Chapter 6
Day 9	Practice session on “Multiple Regression Analysis”	Tutorial questions and supporting material
Day 10	Mid-semester Exam	N/A
Day 11	Multiple Regression Analysis with Qualitative Information: Binary (or Dummy) Variables	Chapter 7
Day 12	Heteroskedasticity	Chapter 8
Day 13	More on Specification and Data Issues	Chapter 9
Day 14	Practice session on “Multiple Regression Analysis”	Tutorial questions and supporting material
Day 15	Basic Regression Analysis with Time Series Data	Chapter 10
Day 16	Basic Regression Analysis with Time Series Data	Chapter 10
Day 17	Further Issues in Using OLS with Time Series Data	Chapter 11
Day 18	Course review	N/A
Day 19	Group Presentation	N/A
Day 20	Final Exam	N/A