



**University of International Business and Economics
International Summer School**

ECON 303 Econometrics

Term: June 12th – July 7th, 2023

Instructor: Jia Ren

Home Institution: Shanghai University of International Business and Economics

Email: j.ren@suibe.edu.cn

Class Hours: Monday through Friday, 120 minutes each day (2,400 minutes in total)

Discussion session: 2 hours each week

Office Hours: TBD

Total Contact Hours: 64 contact hours (45 minutes each, 48 hours in total)

Location: WEB

Credit: 4 units

Course Description:

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.

Course Goals:

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

Course Prerequisites:

Students are expected to have a thorough knowledge of mathematics in an introductory finance course.

Required Textbook:

1. Jeffrey M. Wooldridge (2019), Introductory Econometrics: A Modern Approach, 7th Edition, Cengage

ISBN-10: 1-337-55886-9

ISBN-13: 978-1-337-55886-0

2. Peter Kennedy(2008), A Guide to Econometrics, 6th Edition, Wiley-Blackwell

ISBN: 978-1-405-18257-7

Grading Policy:

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

Grading Scale:

Assignments and examinations will be graded according to the following grade scale:

A	90-100	C+	72-74
A-	85-89	C	68-71
B+	82-84	C-	64-67
B	78-81	D	60-63
B-	75-77	F	below 60

Academic Integrity:

Students are responsible for knowing policy regarding academic honesty. The University of International Business and Economics (UIBE) expects students to be honest in their academic work. Academic dishonesty is viewed as a serious violation of university rules and such misconduct is not accepted by academic community. In particular, students must refrain from plagiarism, cheating and collusion in connection with examinations, submitting substantially the same piece of work to different classes and must fully acknowledge all the sources of ideas and all assistance received in work submitted to the instructor for evaluation. Violation of the rules of academic honesty may lead to suspension or disqualification of the student from further study at UIBE.

Course 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