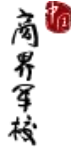




**PHBS**  
北京大学汇丰商学院



# MGT 501

## Empirical Business Analysis

### 4<sup>th</sup> Module, 2023~2024

#### Course Information

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**Instructor: Yue Cheng**

Office: PHBS Building, Room 753

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Office Hour: Wed. 13:30~15:30

**Teaching Assistant:**

Phone:

Email:

**Classes:**

Lectures: Tue. & Fri. 10:30~12:20 (session 1) 13:30~15:20 (session 2)

Venue: PHBS Building, Room

**Course Website:**

If any.

## 1. Course Description

### 1.1 Context

Econometrics is concerned with using aspects of economic theory, mathematics and statistical inference to analyze economic phenomena and relationships. This course approaches econometrics with three broad considerations: 1. the role of econometrics in theoretical and applied economics; 2. the theoretical basis of econometrics; 3. the applied use of econometrics. The basic guidance of statistical software (MS-Excel or SPSS) is also provided for students who have little experience of analyzing data. To make sure students' understanding, individual problem sets will be given after almost every week.

### 1.2 Textbooks and Reading Materials

*Introductory Econometrics* (6<sup>th</sup> edition)– A Modern Approach, Jeffrey M. Wooldridge

*Applied Linear Statistical Models* (5<sup>th</sup> edition), Kutner, Nachtsheim, Neter and Li

*Introduction to Econometrics* (2E edition), James H. Stock and Mark M. Watson

Data sets and in-class labs will be conducted using minitab/SPSS software. Available at <https://www.lib.pku.edu.cn/portal/en/zy/software>

## 2. Learning Outcomes

### 2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment (YES with details or NO)
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	Yes
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Yes
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	Yes
	2.2. Students will be able to apply leadership theories and related skills.	Yes
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	No
	3.2. Our students will practice ethics in the duration of the program.	No
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	Yes
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	Yes
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Yes
	5.3. Our students will demonstrate competency in critical thinking.	Yes

### 2.2 Course specific objectives

- 1) Provide students solid econometric knowledge necessary to assess their academic research and business problems
- 2) Improve students' ability of analyzing data, constructing model, and interpreting the estimation results
- 3) Get students hand dirty as much as possible: opportunities of playing with data sets by using statistical software.

### 2.3 Assessment/Grading Details

Attendance		10
Assignment		20
Term Project	Report	20
	Presentation	10
Exam		40
Total		100

1) Assignment (Individual): Students solve the problem sets by using the technique learnt from the courses individually. Students must submit their final answers by deadline (No late submissions are accepted.). Paper version is strongly recommended.

2) Term project (Team): Students will form the team and each team is required to choose a research question, construct the model, and conduct analysis to answer the research question by using econometric techniques learnt in the class. A team must submit the final report no later than deadline. Every team presents the work at the end of course.

3) Exams: There is a comprehensive exam at the end of the module. The exam will only cover the materials we discuss in the class. The review session might be given before the exam according to the course schedule.

## **2.4 Academic Honesty and Plagiarism**

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

For more information of plagiarism, please refer to *PHBS Student Handbook*.

## **3. Topics, Teaching and Assessment Schedule**

I. Review of Probability and the Foundations of Statistical Inference (2.5 weeks)

II. Simple Linear Regression Model: Specification & Computation (1.5 week)

III. Multiple Linear Regression Model: Statistical Properties and Building Models (2 weeks)

IV. Assumption Violation Solutions (2 weeks)

## **4. Miscellaneous**