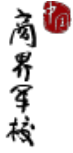




**PHBS**  
北京大学汇丰商学院



Course Code  
Applied Microeconomics  
Module 3, 2018-2019

## Course Information

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**Instructor: Zhimin Li**

Office: PHBS Building, Room 663

Phone: 86-0755-2603-0618

Email: zhimin.li [at] phbs.pku.edu.cn

Office Hour: TBA

**Teaching Assistant: TBA**

Phone:

Email:

**Classes:**

Lectures: Tue & Fri 10:30-12:20

Venue: PHBS Building, Room

**Course Website:**

Course Management System (<http://cms.pkusz.edu.cn/>). I will send email announcements through CMS and post all related course materials there. Please check the course website every week.

## 1. Course Description

### 1.1 Context

Course overview: The goal of this course is for students to learn a set of statistical tools that are useful in conducting empirical research. We will cover applications in selected areas such as applied microeconomics, labor, development, and environmental economics. This course differs from many other econometrics courses in that it is oriented towards applied practitioners rather than future econometricians. It therefore emphasizes research design (relative to statistical technique) and applications (relative to theoretical proofs), though it covers some of each.

Prerequisites: college level calculus, probability and statistics. Students should be familiar with basic probability and statistics, matrix algebra, and the classical linear regression model.

**Statistical software:** Problem sets will be based on Stata and Matlab but students may use any software they choose. However, problem set solutions and classroom discussion will be based on Stata and Matlab.

### 1.2 Textbooks and Reading Materials

The course is not based on any one textbook. Lecture notes and supplemental materials will be provided to students through the Course Management System.

We will pick and choose from a variety of texts, papers, and resources. We will draw most heavily from the following four resources:

[AP] Angrist, Joshua and Jorn-Steffen Pischke (2009). *Mostly Harmless Econometrics*. Princeton University Press.

[KT] Train, Kenneth (2009). *Discrete Choice Models with Simulation*. Cambridge University Press. Another very worthwhile read.

[JW] Wooldridge, J., (2001), *Econometric Analysis of Cross Section and Panel Data*. MIT Press.

## 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.	problem sets, research proposal
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	problem sets, research proposal, presentations
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.	group presentations
	2.2. Students will be able to apply leadership theories and related skills.	group presentations
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.	NA
	3.2. Our students will practice ethics in the duration of the program.	NA
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	lectures
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.	lectures, problem sets, presentations
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	problem sets, research proposal, presentations
	5.3. Our students will demonstrate competency in critical thinking.	problem sets, research proposal, presentations

### 2.2 Course specific objectives

This course is meant to provide a solid foundation for and develop students' interest in conducting empirical research.

## ***2.3 Assessment/Grading Details***

### **Tentative weights are as below:**

**Problem sets (30%):** A total of three problem sets will be distributed throughout of the course and will be graded with coarse granularity. They are meant to solidify students' understanding of the course materials. Students are permitted to work in small groups but each person must turn in separate solutions. Each problem set counts as 10 points. Late problem sets will incur a penalty of 15% (or 1.5 points) per day late.

**Presentation (15%):** Some lecture time will be devoted to discussing research papers relate closely to material we cover. Students will summarize a paper and lead class discussion.

**Research sketch (15%):** An important goal of the class is to help you generate research ideas of your own, especially for your master's thesis. During final week (and into exam week) each student will have ten minutes to pitch his/her idea. We will debrief/react to the idea as a group. A two-page research summary (think grant application!) will be due in the week of finals.

**Midterm exam (30%):** there will be in-class midterm exam with a date to be determined (date will be announced at least two weeks in advance).

**Final exam:** There will be no final exam. Instead, students will hand in a research proposal in lieu of the final. In the last week of classes, students will give a short presentation of their proposal. See Research Sketch above.

**Attendance (10%):** Attendance will be checked randomly. The score is calculated as  $10 - x$ , where  $x$  is the number of absences. Leave request should be made 24 hours before class except for emergency. Job interview **cannot** be a valid reason for leave.

## ***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**

Weeks 1-2: Introduction and Randomized Control Trials

Weeks 3-4: Selection on Observables

Weeks 5-6: Selection on Unobservables

*[Midterm Exam]*

Week 7-8: Discrete Choice Models

Weeks 9: Presentations

*[Research Proposal Due]*

### **4. Miscellaneous**

Email ([zhimin.li@phbs.pku.edu.cn](mailto:zhimin.li@phbs.pku.edu.cn)) is the preferred method of communication.