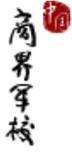




**PHBS**  
北京大学汇丰商学院



## Advanced Microeconomics II Module III, 2018-2019

### Course Information

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**Instructor: Zhuoqiong Chen**

Office: PHBS Building,

Phone: the best way to contact me is via email.

Email: [chenzq926@gmail.com](mailto:chenzq926@gmail.com)

Office Hour: Tuesday 14:20 - 15:20

**Teaching Assistant: TBA**

**Classes:**

Lectures: Tuesday and Friday, 15:30 - 17:20

Venue: PHBS Building,

**Course Website:**

If any.

## 1. Course Description

### 1.1 Context

Course overview:

This course introduces analytical tools of game theory and information economics and their applications to problems related to auctions, contracts, pricing strategy, etc., with the aim to enable students to understand original game-theoretic literature and to prepare them to do research in the field.

Prerequisites:

To enroll in the course you must be familiar with the basic concepts of game theory at the Advanced Microeconomics I level. You must also be familiar with the basic concepts of Calculus and Probability Theory.

### 1.2 Textbooks and Reading Materials

There is no required textbook. The relevant chapters of the following books are good references.

Drew Fudenberg and Jean Tirole, *Game Theory*, MIT Press, 1991. (Ch.6, Ch.7)

Vijay Krishna, *Auction Theory* (2nd edition), Academic Press, 2010. (Ch.1 - Ch.3, Ch.5, Ch.7)

Patrick Bolton and Mathias Dewatripont, *Contract theory*, MIT press, 2005. (Ch.2 - Ch.4)

## 2. Learning Outcomes

### 2.1 Intended Learning Outcomes

<b>Learning Goals</b>	<b>Objectives</b>	<b>Assessment (YES with details or NO)</b>
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	Yes. Students will hand in research proposals.
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Yes. Students will present selected papers in the second half of the course.
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. Students will present selected papers in groups.
	2.2. Students will be able to apply leadership theories and related skills.	No
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.	No
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. The first part of the course covers fundamental theories in game theory and information economics.
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Yes. The course covers topics including auction, contest, and contract design, as well as pricing strategies of firms.
	5.3. Our students will demonstrate competency in critical thinking.	Yes.

## **2.2 Course specific objectives**

The course has several objectives: (a) acquiring advanced knowledge of modern microeconomic theory, in particular, game theory and information economics; (b) developing the ability to set up models that formally analyze economic, finance, and management issues, and to write research papers; (c) developing the ability to critically evaluate others' research.

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

Your grade depends on final exam (50%), group presentation (25%), and research proposal (25%).

The (closed-book) final exam will be held on April 23, Tuesday, 15:30 - 17: 30.

The group presentation will be given by groups with 3-5 students. Each group will choose one paper in the reading list to present in one of the lectures.

Each student is required to submit a research proposal in the field of Microeconomic Theory. Research proposals will be graded in terms of novelty of research questions, modeling choice, and potential contribution to literature. Proposals will NOT be graded based on whether you have solved the model or not.

### **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**

Game Theory: Games of incomplete information

Auction Theory: Independent private value auctions; Auctions with affiliated values;

Information acquisition and disclosure in auctions

Contract Theory: Moral hazard; Adverse selection; Screening

Strategic information transmission: Cheap talk; Bayesian Persuasion

Miscellaneous