

# FIN511 Advanced Microeconomics I Module 2, 2017-2018

# **Course Information**

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#### Teaching Assistants: TBA

TA Office Hours will be announced regularly on Course web site.

#### Classes:

Lectures: Monday/Thursday 13:30-15:20

Venue: PHBS Building, Room 229

*Course Website: TBA* 

#### **1.** Course Description

#### 1.1 Context

Course overview:

We cover basic tools and current topics of modern microeconomic theory. This is the first course of the microeconomic sequence offered to economics and finance program.

Prerequisites:

Basic knowledge and understanding of undergraduate-level microeconomics is necessary. Compared to undergraduate-level microeconomics, microeconomics in graduate-level uses more mathematical methods and logical derivations of key results. Basic knowledge of Calculus, Linear Algebra and Probability Theory is required.

You have to pass the math requirements (either math exam or business math course) in order to take the course. If you do not have enough background in Economics or haven't learned Economics in your undergraduate, please talk to the instructors.

### 1.2 Textbooks and Reading Materials

Advanced Microeconomic Theory, (2011) 3rd Ed. Geoffrey A. Jehle & Phillip J. Reny, Prentice Hall

There are several other textbooks that might be useful for your reference. Microeconomic Theory (1995), Mas-Colell, Whinston & Green, Oxford University Press. Microeconomic Analysis (1992), H. Varian, W. W. Norton & Company. Mathematics for Economists (1994), Simon & Blume, W. W. Norton & Company.

# 2. Learning Outcomes

Learning Goals	Objectives/Outcomes	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.	Y (Some of the assigned problem sets will be open-ended and will require students to do research-oriented work.)
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Y (Students will be asked to actively participate in class discussion.)
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.	Y (Students will be encouraged to form groups and hold regular meetings in order to solve the problem sets. This item is not directly evaluated in class.)
	2.2. Students will be able to apply leadership theories and related skills.	Y (Group meetings and discussions will provide opportunities to practice leadership skills. This item is not directly evaluated in class.)
<ol> <li>Our graduates will be trained in ethics.</li> </ol>	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.	N
	3.2. Our students will practice ethics in the duration of the program.	Ν
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	Y (Students will be exposed to worldwide examples of the theories and need to interact with students from all over the world. This item is not directly evaluated in class.)
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.	Y (The course covers one of most fundamental theories of Economics regarding economic agents.)
		N/ / M

5.2. Our students will be prepared to face

problems in various business settings and

5.3. Our students will demonstrate

competency in critical thinking.

find solutions.

# 2.1 Intended Learning Objectives / Outcomes

Y (Many problems of

be considered and students will be asked to solve these problems in both abstract and practical form.) Y (The course will

economics agents will

provide students the

tools to describe

		numerous problems and analyse them, which necessarily require their critical thinking ability.)
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# 2.2 Course specific objectives

The course has several objectives: (a) acquiring basic knowledge of modern microeconomic theory that you can further pursuit in higher level; (b) getting familiar with the use of theoretical tools in other topics in economics and finance; and (c) developing the ability to set up a model and to formally analyze economic issues.

# 2.3 Assessment/Grading Details

Your grade depends on two final exams (80%), class participation (10%), and homework (10%).

There will be two Final exams. The first final exam will take place after 9 classes and the second one will take place at the end of the class. Each final exam will cover materials covered in the first half and the second half, respectively. All exams are closed-book exams. The actual date and time of exams will be announced in class.

The class participation (10%) will be marked periodically. There will be several problem sets (10%).

Park and Xu will each give grades. Your final grade for the whole course will be the average of the grades you receive from the two.

### 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. Introduction & Mathematics Overview (Ch.A1, A2) week 1
- Main Objectives of the Course
- Introduction to Modeling Methods and Motivation
- Review of Calculus and Linear Algebra
- Some Topics of Real Analysis and Topology
- II. Consumer Theory (Ch. 1, 2.1-2.3) week 2-4
- Preliminaries of Consumer's Choice
- Preference Ranking
- Utility Representation
- Utility Maximization Problem and Marshallian Demand
- Indirect Utility Function
- Expenditure Minimization Problem and Hicksian Demand
- Expenditure Function
- Duality
- Comparative Static Analysis of Demand
- III. Producer Theory (Ch. 3) week 5-6
- Production Sets and Production Function
- Cost Function and Cost Minimization Problem
- Short Run Cost Functions
- Long Run Cost Functions
- Factor Demand Functions
- IV. Market Equilibrium week 6-7
- Aggregate Supply
- Aggregate Demand
- Market Equilibrium
- V. Decision Under Uncertainty (Ch. 2.4) week 7-8
- Objective and Subjective Uncertainty
- Expected Utility Hypothesis and von Neumann-Morgenstern Utility Function
- Allais Paradox
- Alternative Models of Choice under Uncertainty
- Attitude toward Risk
- Measure of Risk Aversion
- First and Second Order Stochastic Dominance
- In case time permits we will also cover:

VI. Intertemporal Choice & Production: Supply and Demand for Factor Market – week 8-9 • Supply of Labor: The Labor-Leisure Decision

- Supply of Capital: The Consumption-Saving Decision
- Intertemporal Production: The Demand for Capital

VII. Some Applied Topics (e.g. household production) - week 9

### 4. Miscellaneous