

# Micro Analysis

Hong Kong University of Science and Technology  
Department of Economics

ECON5130, Fall 2018

Section L1: Mon-Wed, 9-10:50, Rm 1014

Section L2: Mon-Wed, 12-1:50, Rm 1014

Instructor: Wang Susheng

Email: s.wang@ust.hk

## 1. Course Description

### Course Objectives

This course covers theories of modern microeconomics. It intends to introduce the main theories and methodologies of neoclassical microeconomics, game theory, and information economics. Students are required to understand the theories and concepts intuitively, to master the modeling techniques and derivations, and to solve simple versions of the problems.

### Intended Learning Outcomes

- Present micro theories.
- Introduce micro methodologies.
- Present many examples.

## Teaching Approach

This course focuses on standard theories in advanced microeconomics. In class, I will display slides, which contain the crucial information (results and definition). I will also derive the models and proofs step by step. If necessary, I will also draw relevant graphs step by step.

## 2. Resources

### Main Textbook

- 王苏生, 杨蔚 (2014). 高级微观经济学理论. 人民大学出版社. 京东网, 亚马逊, ¥32.
- Wang, S. (2016). *Microeconomic Theory*. 3<sup>rd</sup> ed., PDF copy, free.
- Wang, S. (2018). *Microeconomic Theory*. 4<sup>th</sup> ed. Springer.

### Supplement Textbooks

- Varian, H.R. (1992). *Microeconomic Analysis*. Norton, in library reserve.
- Jehle, G.A.; Reny, P.J. (2011). *Advanced Microeconomic Theory*, 3<sup>rd</sup> ed, in library reserve and bookstore (\$280).
- Mas-Colell, *et al.* (1995). *Microeconomic Theory*. Oxford University Press, in library reserve and bookstore (\$370).
- Laffont, J.J. (1995). *The Economics of Uncertainty and Information*. MIT, in library reserve and at the course website.

- Wang, S. (2008). *Math in Economics*. People University Publisher, in library and bookstore (\$33), HB135 W356.

## **Course Website**

[www.bm.ust.hk/~sswang/5130/](http://www.bm.ust.hk/~sswang/5130/). The username is 513x. Slides, reading materials and problem sets are there. All the slides shown in class are downloadable from this website.

## **3. Course Outline**

### **Topics**

Topic 1: Neoclassical Economics. Chapters 1-4, 10 lectures

Topic 2: Game Theory. Chapter 7, 5 lectures

Topic 3: Market Information. Chapter 10, 5 lectures

Topic 4: Mechanism Design. Chapter 11, 5 lectures

### **Course Prerequisites**

Basic math knowledge and advanced optimization methods in Wang (2008).

### **Course Arrangement**

Problem Sets: There is one problem set for each chapter. No need to hand in the problem sets.

Exam: There is one exam. It will be arranged by ARRO.