# **Micro Analysis**

ECON5130, Fall 2021

Section L1: Mon, Wed 9-11. Zoom 984-5400-3537 Instructor: Wang Susheng

Section L2: Mon, Wed 12-2. Zoom 928-5466-6719 Office: Zoom 824-333-8415

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# 1. 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**

➤ Wang, S. (2018). *Microeconomic Theory*. 4<sup>th</sup> ed. Springer, \$1,020.

#### **Supplement Textbooks**

- ➤ 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.
- ➤ Varian, H.R. (1992). Microeconomic Analysis. Norton.
- > Jehle, G.A.; Reny, P.J. (2011). Advanced Microeconomic Theory, 3<sup>rd</sup> ed (\$280).
- Mas-Colell, et al. (1995). Microeconomic Theory. Oxford University Press (\$370).
- ➤ Laffont, J.J. (1995). The Economics of Uncertainty and Information. MIT.
- > Wang, S. (2008). *Math in Economics*. 1st ed. People University Publisher (\$33).
- ➤ Wang, S. (2015). Math in Economics. 2<sup>nd</sup> ed. World Scientific Publishing Co.

#### **Course Website**

www.bm.ust.hk/~sswang/5130/. 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, 2015).

# **Course Arrangement**

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

Exam: There is only one exam, which is on Dec 8, Wed, 9am-12.