Information Economics

<div align="right">Spring 2022</div>

Course	ECON 5330	Instructor:	Wang Susheng
Classroom:	Rm 1007. Zoom 979-4430-4621	Individual meeting:	Zoom 824-333-8415
Class:	Monday, 8:30am-12:00	Tel:	2358-7600
Dates:	Feb 4 − May 9	Email:	s.wang@ust.hk

1. Description

Course Objectives

This course covers theories and applications of information and organizational approaches. Specifically, it covers incentive contracts, organization theory, and their applications. Students are required to understand various concepts intuitively and to be able to deal with simple applications.

Themes: competition, information, incentive. Approaches: GE (perfect competition) -> IO (competition) -> mechanism design (information) -> contract -> organization (information + incentive).

Intended Learning Outcomes

Present standard concepts in information economics.

Present several classical papers on information economics.

Present the standard theory and approaches in information economics.

Present the complete and incomplete contracts.

Teaching Approach

This course focuses on standard theories in information economics. 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. Outline

Topic 1: Game Theory: Cooperative Games (Chapter 9)

Topic 2: Standard Agency Theory (Chapter 12)

Topic 3: Complete and Incomplete Contracts (Wang 2016)

3. Resources

Books

Laffont, J.J. (1995). *The Economics of Uncertainty and Information*, MIT.

Jehle, G.A., Reny, P.J. (2011). *Advanced Microeconomic Theory*, 3rd ed, Prentice Hall.

Salanié, B. (1999). *The Economics of Contracts: A Primer*. MIT.

Wang, S. (2016). *Microeconomic Theory,* 3rd ed. PDF version, free.

Wang, S. (2018). *Microeconomic Theory,* 4th ed. Springer.

Papers

Bhattacharyya, S.; Lafontaine, F. 1995. Double-Sided Moral Hazard and the Nature of Share Contracts. *RAND Journal of Economics,* 26(4), 761-781.

Holmström, B. 1979. Moral Hazard and Observability. *Bell Journal of Economics,* 10, 74-91.

Kim, S.K.; Wang, S. 1998. Linear Contracts and the Double Moral-Hazard. *Journal of Economic Theory*, 82, 342-378.

Wang, S. 2016. Definition of Incomplete Contracts. Working Paper.

Course Website

www.bm.ust.hk/~sswang/5330/, which contains slides, reading materials and problem sets.

4. Arrangement

Course Prerequisites

(1) Micro Analysis (ECON5130 or higher)

(2) Basic math knowledge and advanced optimization methods.

Problem Sets and Exam

Problem Set: One problem set for each of the first two topics. No need to hand in your answers.

Exam: There is one exam, which is on May 13, Friday, 9:30am-13:00.

Grading Policy

The exam counts for 100%.