

# Information Economics

ECON5330, Spring 2019

Classroom: Room 2404, lift 18  
Class: Monday, 9am-11:50  
Instructor: Wang Susheng

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## 1. Description

### Course Objectives

This course covers theories and applications of information and organizational approaches. Specifically, it covers the three main topics in information economics: complete contracts, incomplete contracts, and organization theory. Students are required to understand various concepts intuitively and to be able to deal with simple applications.

## **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**

The big picture: GE -> IO -> mechanism design -> contract -> organization

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

Topic 2: Standard Agency Theory (Chapter 12)

Topic 3: Complete and Incomplete Contracts (Wang 2016)

Topic 4: Organization Theory and Its Applications (Papers)

# 3. Resources

## Books

Laffont, J.J. (1995). *The Economics of Uncertainty and Information*, MIT, at our course website.

Jehle, G.A., Reny, P.J. (2011). *Advanced Microeconomic Theory*, 3<sup>rd</sup> ed, in library reserve and bookstore, \$280.

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

Wang, S. (2012). *Microeconomic Theory*, 2<sup>nd</sup> ed. McGraw-Hill, \$209.

Wang, S. (2016). *Microeconomic Theory*, 3<sup>rd</sup> ed. Free PDF version.

## 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/](http://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, on March 25 (Monday), covering the first two topics.

**Paper review:** It is a homework. I will select one paper for you to do a paper review. I will give you a template for your review, which specifies what you need to do in your review. How well you do in the review will depend on what you have learned from Topics 3 and 4. Email your review to me by the midnight of May 12.

## **Grading Policy**

The exam counts for 50%, and the paper review counts for 50%.