Econ 7096: Industrial Organization (I)
產業組織一
Course Outline

General Information:
Course Hours: W 3:30-5:20    Place: 社科研 604
Contact Information: (Phone) 2782-2791 ext 506 (e-mail) myliang@econ.sinica.edu.tw
Lecture notes: http://idv.sinica.edu.tw/mliang/Teaching.htm

Grading: Grades will be based on discussion participation (10%), presentation (40%) and one exam (50%).

Reference Books:
Paul Milgrom, Putting Auction Theory to Work, Cambridge University Press, 2004

Readings:
Daniel Kahneman , Thinking, Fast and Slow, 2011
James Surowiecki , The Wisdom of Crowds, 2005

Lectures:
1. Supermodularity and Complementarity in Economics
   1.1 Lattice Theory and supermodularity
       a) Cardinal: supermodular and increasing differences
       b) Ordinal: quasi-supermodular and single crossing property
       c) Single crossing property and Spence-Mirrlees condition
       d) application: consumer and growth theory, monopoly pass-through, assortative matching
   1.2 Stochastic:
       a) log-supermodular and Monotone likelihood Ratio Order
       b) application: portfolio and firm investment problems
   1.3 Supermodular games
       application: oligopoly competition, macroeconomic coordination failure, arms races,
bank runs, warrant exercise, technology adoption and diffusion, R&D competition, pretrial bargaining, coordination in teams, search model, signaling games


2 **Theory of the Firm**
   2.1 Holdup Problem
   2.2 Ownership Contracts
   2.3 Optimal Legal Rules for Breach Remedies

3. **Market Structure and Competition**
   3.1 Product Quality, Product Differentiation
   3.2 Durable Goods Monopoly
   3.3 Horizontal Mergers, Entry and Exit
   3.4 Vertical Restraints
   3.5 Price Discrimination

4. **Mechanism Design and Auction Theory**
5. **Timing and Self Control**

