

## **Economics of Asymmetric Information EC306.01, Spring 2003**

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In the microeconomic theory course, you learnt about supply and demand, market-clearing prices, market efficiency, welfare, and more, under the unrealistic assumption that all information is freely available to anyone. The concepts covered in this course will enable you to understand certain market inefficiencies and aspects of the organizational design of economic activities, which may be traced to informational asymmetries. As in the microeconomics course, ideas will be developed using models (graphical and mathematical).

### **Texts**

The required textbook is The Economics of Information, by Ian Molho (Blackwell Publishers, 1997). Other required readings (see outline) will be distributed during the course.

### **Prerequisites**

Microeconomic theory (EC201 or EC203) and calculus.

### **Exams, problem sets and grading**

There will be one mid-term exam (the date will be announced at least three weeks in advance), and one final exam (on May 5 at 9.00). Each exam will count for 35% of the course grade (the final exam is not cumulative). The remaining 30% will be determined by your grades on four problem sets, and by your class participation. Late problem sets will not be accepted, and no make-up exams will be given.

Note:

Although you are encouraged to discuss problem sets with others, the work you hand in should be yours alone. Solutions that are too similar will get a low grade.

### **Office hours**

Mondays and Wednesdays 1.00 - 3.00, and by appointment.

## Preliminary Outline

### I. Introduction

- A. Review of microeconomic theory
  - B. Some mathematical tools
  - C. Introducing informational asymmetries
- Appendix  
Ch. 1

### II. Adverse selection

- A. The market for lemons
  - B. Extensions of the basic model
  - C. Experimental and empirical evidence
- ①, Ch. 2  
Ch. 4

### III. Extracting information (1): Signalling

- A. A model of signalling
  - B. Experimental and empirical evidence
- ②, Ch. 5  
Ch. 8

### IV. Extracting information (2): Screening

- A. Second-degree price discrimination
  - B. Insurance
- Ch. 6  
③

### V. Moral hazard (1)

- A. Issue: controlling costs in health insurance
- B. Organizational responses

### VI. Moral hazard (2)

- A. Introduction
  - B. The principal-agent model
  - C. Extensions and evidence
- ④, Ch. 9  
Ch. 10  
Ch. 11

① Akerlof, G.A. (1970) "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 84: 488-500.

② Spence, M. (1973) "Job Market Signaling," *Quarterly Journal of Economics*, 87: 355-374.

③ Rothschild, M. and J. Stiglitz (1976) "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *Quarterly Journal of Economics*, 90:629-649.

④ Milgrom, P. and J. Roberts (1990) *Economics, Organization and Management* (Chapter 6). Englewood Cliffs: Prentice Hall.