In many (perhaps most) economic situations, the actors must behave without full knowledge of the consequences of their actions; often some actors have better knowledge of the situation than others. Whether you are interested in labor markets, financial markets, regulation, health, industrial organization, economic development, even macro – there is virtually no field in economics where "information asymmetries," as they are called, cannot be expected to play an important role.

This course is designed to help you understand how economists think about situations marked by informational asymmetries. The consequences for the functioning of markets can be quite dramatic, leading to behavior quite different from what you may have come to expect from your intermediate micro course. Moreover, they can account for all kinds of economic institutions that are difficult to explain within the standard framework.

Format: lecture/discussion TuTh 2-3:15. The course content will emphasize theory and analysis.

Prerequisites: Microeconomic theory, calculus, and elementary probability theory and statistical inference (in other words the standard core courses for the masters’ degree). Game theory is not needed, although it will help. I assume you are familiar with the basics of expected utility theory; finer points will be introduced as we proceed.

Requirements and timing: Problems sets (six, worth up to 30% total); one in-class exam on Thursday, March 19 (up to 30%); class participation 5%; final exam on Wednesday May 6, 3.00-5.00 (TBC; 35+%).

Points not made over the course of the semester will be added to the value of the final; this system is designed to give you some insurance and to take account of improved performance over the term. In return for this built-in leniency, there can be no make-up exams and no late problem sets.

We shall try to adhere to the following schedule for issuing and collecting problem sets, which will be due in class:
The course is based on the lectures (so attendance is important), which do not conform to any existing text. An advanced text (standard for first-year PhD courses) that covers some of the topics is Mas-Colell, Whinston and Green, *Microeconomic Theory*; some of the material in the last part of the course is covered in Chamley, *Rational Herds*. These are available in the library. Reading them is optional.

**Topics:** After the introducing the subject, we will review applications of expected utility theory, the standard approach to understanding decision making under uncertainty, and an essential ingredient for the analysis that follows. We will also discuss the “standard” model of insurance markets under imperfect but *symmetric* information, since that provides an important benchmark for much of what follows.

We will then turn to the economics of information. Time permitting, we shall cover the following topics. Any scheduling updates and suggested readings, as well as all problems sets, and any course notes will be available on the course’s Blackboard website.

**Moral Hazard**
- Insurance
- Principal-agent problems and contracts
  - Risk sharing vs. Incentives
  - Application: Entrepreneurship
  - Surplus Extraction vs. Incentives
  - Applications: Efficiency wages, unemployment; credit markets
- Complex organizations: partnerships and multiple tasks

**Adverse Selection**
- The market for lemons
- Market signaling
- Screening

**Mechanism Design**
- Price Discrimination
- Auctions

**Learning:** Bandits, Herds and Loopholes

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**Academic Conduct:** You are expected to know and understand the provisions of the CAS Academic Conduct Code. Cases of suspected academic misconduct will be referred to the Dean’s Office.