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The Economics of Information

Master Program Experimental and Empirical Economics
SS 2025

General Remarks

The course "The Economics of Information" consists of a weekly 3-hour lecture with integrated tutorial, yielding a total of 7.5 ECTS. This course is an elective course in the Master Program "Experimental and Empirical Economics".

Prerequisites

Knowledge of basic concepts in graduate-level microeconomics and basic game theory are of advantage.

Time and Place

Classes will be regularly on Monday, 11:30-14:00 in SR 9.

Class starts on Monday, March 3, 2025.

Requirements for successful completion:

- *Attendance:* Regular attendance and participation in class is expected.
- *Problem sets:* There will be several problem sets assigned. You may work in groups on these assignments and hand in one homework per group. A maximum of 20% of the overall grade is assigned for completeness and presentation of homework problems in class.
- *Presentation:* Each student will have to present a paper, which accounts for 20% of the overall grade. More information to the presentation (topics, dates) will be given in the first week of class.
- *Written exams:* Exam 1 on May 5, 2025
  Exam 2 on June 23, 2025
  Please keep these dates free from any other obligations. Alternative exam dates can be offered only in exceptional circumstances.

Grading:

20% homework assignment, 20% paper presentation, 30% exam 1, 30% exam 2.

Registration:

Registration is via computer. Registered students who decide to unregister must do so by notifying the lecturer no later than March 20, 2025.

Topics of this course:

We look into situations with information asymmetries, where one party has more or better information than the other: in markets, in one-to-one relations, in small groups of economic agents. We study theoretical approaches to mitigate the inefficiencies and suboptimal outcomes resolve the informational problem (e.g., optimal contracts or mechanism design). We look at experimental evidence on the performance of these solution concepts, and how people deal with informational problems.

Contract theory (Principle-Agent-Theory) designs the strategic environment (i.e. a contract with given rules) when one party' lack of information leads to undesirable outcomes, with the goal to induce players to behave in the desired way. We consider

- *market failure with asymmetric information (e.g. Akerlof's lemons market)*
- *optimal contracts with asymmetric information (adverse selection problems, e.g. insurance markets)*
- *screening and signaling models (e.g. Spence's education model)*

Information Asymmetries and Mechanism Design

- *incentives in voting schemes: strategic voting and manipulation*
- *incentives to provide public goods (socially efficient allocations)*
- *solutions to allocate indivisible objects (Solomon's dilemma)*
- *mechanisms for fair division*
- *Experimental Evidence on the performance of these mechanisms*

Bargaining Theory and Applications with Information Asymmetries

- *models with complete information (delay, outside options)*
- *models with incomplete information (one-sided, two-sided)*
- *bargaining when agents have (non-equal) claims*

We also consider behavioral responses to information, and how individual decision-making processes are affected by the available information.

Social Information and Information Updating

- *Bayesian updating – Examples and evidence*
- *Information cascades*
- *Experimental evidence on how people process information*

Room will be given for students' own ideas for presentation topics.