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# INFORMATION TRANSMISSION IN ECONOMICS

Department of Economics, European University Institute  
Course Syllabus (Spring 2013). Updated 12 January 2013.

## COURSE INSTRUCTOR

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## COURSE INFORMATION

Pre-requisites: First-year micro sequence or equivalent.  
Lectures: 5 lectures of 2 hours each.

## COURSE OVERVIEW

Information transmission is by no means a new subject in economics but it is a subject that continually finds new applications. The field explores how information can be shared between agents who have different objectives and the applications range from central banks and financial markets to media and politics. The course introduces models of information transmission and the basic dichotomy between non-verifiable information (cheap talk) and verifiable information models. A special emphasis is given to the canonical model of Crawford and Sobel and its extensions. Different applications are then analysed.

## READING

The reading for each class is specified in the outline. I will focus on the “classic” papers but we will also discuss more recent applications. As a very well-written and sometimes even funny introduction you should read *Farrel and Rabin (1996)*.

## OUTLINE

- Class 1. *Introduction*. Discussion of the difference between verifiable information and cheap talk. Examples from economics and 'real life'. Analysis of Milgrom and Roberts (1986) as an example of a verifiable information model.
- Class 2. *Cheap talk*. Analysis of Crawford and Sobel (1982). Discussion of concepts, the model's importance and experimental evidence.
- Class 3. *Extensions to Crawford and Sobel*. Cheap talk with two audiences (Farrell and Gibbons (1989)), uncertainty about sender bias (own model), discussion of other extensions.
- Class 4. *Applications 1: Financial markets*. Stein (1989) on central banks and Morgan and Stocken (2003) on stock recommendations. Empirical evidence.
- Class 5. *Applications 2: Media and politics*. Gentzkow and Shapiro (2006) on media bias and Cukierman and Tommasi (1998) on political credibility. Empirical evidence.

## REFERENCES

- Crawford and Sobel (1982). "Strategic Information Transmission". *Econometrica* 50(6), p. 1431-1451.
- Cukierman and Tommasi (1998). "When Does it Take a Nixon to Go to China?". *American Economic Review* 88(1), p. 180-197.
- Farrel and Rabin (1996). "Cheap Talk". *Journal of Economic Perspectives* 10(3), p. 103-118.
- Farrell and Gibbons (1989). "Cheap Talk with Two Audiences". *American Economic Review* 79(5), p. 1214-1223.
- Gentzkow and Shapiro (2006). "Media Bias and Reputation". *Journal of Political Economy* 114(2), p. 280-316.
- Milgrom and Roberts (1986). "Relying on the Information of Interested Parties". *RAND Journal of Economics* 17(1), p. 18-32.
- Morgan and Stocken (2003). "An Analysis of Stock Recommendations". *RAND Journal of Economics* 34(1), p. 183-203.
- Stein (1989). "Cheap Talk and the Fed: A Theory of Imprecise Policy Announcements". *American Economic Review* 79(1), p. 32-42.