

## Syllabus

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**Course: Game Theory**  
**Professor: Daniel Monte**

### 2022 SECOND SEMESTER

#### COURSE OUTLINE

This is an advanced course in economic theory. We will cover dynamic games with incomplete information, communication, information design and persuasion in strategic settings.

#### PROGRAM

Below is a tentative sequence of topics. We will divide the course in lectures and presentations by students in which we will discuss the papers presented.

1. Dynamic Games of Incomplete Information
2. Perfect Bayesian Equilibrium and Sequential Equilibrium.
3. Reputation and Long Run Relationships.
4. Cheap Talk
5. Bayesian Persuasion and Information Design
6. Information Transmission under Constraints
7. Design of Credit Ratings and Recommendation Systems

#### BIBLIOGRAPHY

##### Main References

Andreu Mas-Colell, Michael Whinston & Jerry Green: Microeconomic Theory. (MWG).  
Fudenberg and Tirole: Game Theory.

Kamenica, Emir and Matthew Gentzkow (2011). Bayesian Persuasion. *American Economic Review*, 101, pp. 2590-2615.

Crawford, Vincent and Joel Sobel (1982). Strategic Information Transmission. *Econometrica*, 50, pp. 1131-1151.

## ARTICLES

Below is a tentative sequence of topics and relevant papers. Other papers will be added to the list. There will not be enough time to cover all the papers in this list. The plan is to cover one or at most two papers each class. We will meet for 14 classes. We will divide the course in lectures and presentations by students in which we will discuss the papers presented. Students should present something related to the topic of the course.

- Bhaskar, V, and Caroline Thomas. 2018. "Community Enforcement of Trust with Bounded Memory." *The Review of Economic Studies*, 86(3): 1010–1032.
- Kovbasyuk, Sergei and Giancarlo Spagnolo. Memory and markets. *Working Paper*, 2016.
- Liu, Qingmin, and Andrzej Skrzypacz. 2014. "Limited records and reputation bubbles." *Journal of Economic Theory*, 151: 2–29.
- Lorecchio, Caio and D. Monte "Information Design with Constrained Communication Rules," working paper, FGV.
- Best, James, and Daniel Quigley. 2017. "Persuasion for the Long Run." Working paper.
- Mathevet, Laurent, David Pearce, and Ennio Stacchetti. 2018. "Reputation and Information Design." WP, New York University.
- Sims, C. A. (2003). Implications of rational inattention. *Journal of Monetary Economics* 50(3), 665–690.
- Wei, D. (2020). Persuasion under costly learning. *Journal of Mathematical Economics*, 1–26.
- Matyskova and Montes (2020) Bayesian Persuasion With Costly Information Acquisition, working paper.
- Le Treust, M. and T. Tomala (2019). Persuasion with limited communication capacity. *Journal of Economic Theory* 184, 104940.
- Lipnowski, E., L. Mathevet, and D. Wei (2020). Attention Management. *American Economic Review: Insights* 2 (1), 17–32.
- Ekmekci, Mehmet. Sustainable reputations with rating systems. *Journal of Economic Theory*, 146(2):479–503, 2011.
- Che, Yeon-Koo, and Johannes Horner. 2017. "Recommender Systems as Mechanisms for Social Learning." *The Quarterly Journal of Economics*, 133(2): 871–925.
- Horner, Johannes and Nicolas S Lambert. Motivational ratings. *Working Paper*, 2016.
- Kremer, Ilan, Yishay Mansour, and Motty Perry. 2014. "Implementing the Wisdom of the Crowd." *Journal of Political Economy*, 122(5): 988–1012.
- Erik Lillethun. Optimal information design for reputation building. *Working Paper*, 2016.
- Alex Smolin. Optimal feedback design. *Working Paper*, 2015.
- Vong, Allen "Firm Certification," working paper, Yale University.

## GRADING

Evaluation: Presentations and Participation. The exact details will depend on the number of students enrolled.

## PROFESSOR – EMAILS

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