

TITLE

Course title - Intitulé du cours	Advanced Economic Theory I
Level / Semester - Niveau /semestre	Deeqa semester 1
School - Composante	
Teacher - Enseignant responsable	Alex Smolin (15h)
Other teacher(s) - Autre(s) enseignant(s)	Takuro Yamashita (15h)
Other teacher(s) - Autre(s) enseignant(s)	Renato Gomes (15h)
Other teacher(s) - Autre(s) enseignant(s)	
Other teacher(s) - Autre(s) enseignant(s)	
Other teacher(s) - Autre(s) enseignant(s)	
Lecture Hours - Volume Horaire CM	45
TA Hours - Volume horaire TD	0
TP Hours - Volume horaire TP	0
Course Language - Langue du cours	English
TA and/or TP Language - Langue des TD et/ou TP	

Teaching staff contacts - Coordonnées de l'équipe pédagogique :

Course's Objectives - Objectifs du cours :

Course outline :

Prerequisites - Pré requis :

Grading system - Modalités d'évaluation :

Bibliography/references - Bibliographie/références :

May 26, 2019

A tentative syllabus for Deeqa, Semester 1: Alex Smolin

Theme: Information Design

- Statistical Experiments, Informativeness orders (1 week)
- Information Design—Single agent (1 week)
- Information Design—Multiple agents (1 week)
- Applications (2 weeks)

Takuro Yamashita
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Office hour: By appointment

1. Course description

This course is to introduce some topics in microeconomic theory. The set of topics to be covered might change, but for the moment I plan to cover introductory/intermediate levels of mechanism design, and then cover various topics in mechanism design. The first part of the course would be based on my lecture notes regarding these topics, and the second part of the course would be to read some recent papers in those topics together. The (main) target students are those who are in DEEQA and want to do research in microeconomic theory and/or its applications.

2. Objective

The goal is to make students familiar with some topics in microeconomic theory so that they can independently digest/evaluate academic papers and have basic background for writing DEEQA/PhD theses in those or relevant fields.

3. Prerequisite

Although there is no formal prerequisite, I would assume some basic mathematical knowledge (algebra, analysis, probability, etc). Also, basic knowledge of game/contract/mechanism design theory would be helpful.

4. Evaluation

In-class presentation. An oral exam may be added. Also, late arrivals and non-attendance may affect the grade.

6. List of papers

In the next page is a tentative list of papers that a student can choose from for presentation.

Syllabus: Part 3 of Advanced Economic Theory

Mechanism Design under Competition

Fall 2019

Instructor: Renato Gomes (renato.gomes@tse-fr.eu)

Office Hours: after class or by appointment

Evaluation: The grade comes from a research proposal submitted at the end of the course.

This part of the course focuses on competition on mechanisms by multiple principals. The papers marked with an * will be discussed in class.

The General Theory

- *Epstein, L., and M. Peters (1999): “A Revelation Principle for Competing Mechanisms,” *Journal of Economic Theory*, 88(1): 119–160.
- *Martimort, D., and L. Stole (2002): “The Revelation and Taxation Principles in Common Agency Games,” *Econometrica*, 70(4): 1659–1673.
- *Yamashita, T. (2010): “Mechanism Games with Multiple Principals and Three or More Agents,” *Econometrica*, 78(2): 791–801.
- *Tennenholtz, M. (2004): “Program Equilibrium,” *Games and Economic Behavior*, 49(2): 363–373.
- Peters, M. (2001): “Common Agency and the Revelation Principle,” *Econometrica*, 69(5): 1349–1372.
- Peters, M. (2014): “Competing Mechanisms,” *Canadian Journal of Economics*, 47(2): 373–397.
- Peters, M. (2010): “On the Revelation Principle and Reciprocal Mechanisms in Competing Mechanism Games,” Discussion paper, University of British Columbia.
- Peters, M., and B. Szentes (2012): “Definable and Contractible Contracts,” *Econometrica*, 80(1): 363–411.

- Peters, M., and C. Troncoso-Valverde (2013): “A folk theorem for competing mechanisms,” *Journal of Economic Theory*, 148(3): 953-973.
- Renou, L., and T. Tomala (2012): “Mechanism Design and Communication Networks,” *Theoretical Economics*, 7: 489-533.
- Xiong, S. (2013): “A Folk Theorem for Contract Games with Multiple Principals and Agents,” Discussion paper, Rice University Discussion Paper.
- Bernheim, D., and M. Whinston (1986): “Common Agency,” *Econometrica*, 54: 923-942.
- Bernheim, D., and M. Whinston (1987): “Menu Auctions, Resource Allocation, and Economic Influence,” *Quarterly Journal of Economics*, 101: 1-33.
- Bergemann, D., and J. Välimäki (2003) “Dynamic Common Agency,” *Journal of Economic Theory*, 111(1): 23-48.
- Calzolari, G., and A. Pavan (2010) “Truthful Revelation Mechanisms for Simultaneous Common Agency Games,” *American Economic Journal: Microeconomics* 2: 132-190.
- Calzolari, G., and A. Pavan (2009) “Sequential contracting with multiple principals,” *Journal of Economic Theory*, 144: 502-531.
- Calzolari, G., and A. Pavan (2008) “On the use of menus in sequential common agency,” *Games and Economic Behavior*, 64: 328-334.

Competition in Auctions

- *Burguet, R., and J. Sákovics (1999): “Imperfect Competition in Auction Designs,” *International Economic Review*, 40(1): 231-247.
- *McAfee, P. (1993): “Mechanism Design by Competing Sellers,” *Econometrica*, 61(6), 1281-1312.
- *Peters, M., and S. Severinov (1997) “Competition among Sellers Who Offer Auctions Instead of Prices,” *Journal of Economic Theory*, 75: 141-179.
- *Eeckhout, J., and P. Kircher (2010) “Sorting versus screening: Search frictions and competing mechanisms,” *Journal of Economic Theory*, 145(4):1354-1385.
- *Albrecht, J., P. A. Gautier and S. Vroman (2014) “Efficient Entry in Competing Auctions,” *American Economic Review*, 104(10): 3288-3296.
- Virag, G. (2010) “Competing Auctions: Finite Markets and Convergence,” *Theoretical Economics*, 5 (2): 241-274.

- Peters, M. (1997) “A competitive distribution of auctions,” *Review of Economic Studies*, 64(1): 97-123.
- Peters, M. (2001) “Surplus extraction and competition,” *Review of Economic Studies*, 68(3): 613-631.
- Kim, K., and P. Kircher (2015) “Efficient Competition through Cheap Talk: The Case of Competing Auctions,” *Econometrica*, 83(5): 1849-1875.

Competition and Price Discrimination

- *Champsaur, P., and J.-C. Rochet (1989) “Multi-Product Duopolists,” *Econometrica*, 57: 533- 557.
- *Armstrong, M., and J. Vickers (2001) "Competitive Price Discrimination," *Rand Journal of Economics*, 32(4): 579-605.
- *Rochet, J.C., and L. Stole (2002) "Nonlinear Pricing with Random Participation," *Review of Economic Studies*, 69(1): 277-311.
- *Garrett, D., R. Gomes and L. Maestri (2018) “Competitive Screening Under Heterogeneous Information,” Working Paper.
- *Calzolari, G., and V. Denicolò (2013) “Competition with Exclusive Contracts and Market-Share Discounts,” *American Economic Review*, 103: 2384-2411.
- Armstrong, M., and J. Vickers (2010) "Competitive Non-linear Pricing and Bundling," *Review of Economic Studies*, 77(1): 30-60.
- Calzolari, G., and V. Denicolò (2015) “Exclusive contracts and market dominance,” *American Economic Review*, 105: 3321-3351.
- Calzolari, G., and V. Denicolò (2011) “On the anti-competitive effects of quantity discounts,” *International Journal of Industrial Organization*, 29: 337-341.
- Bénabou, R., and J. Tirole (2016) “Bonus Culture: Competitive Pay, Screening, and Multitasking,” *Journal of Political Economy*, 124: 305-370.
- Fabra, N., and J. P. Montero (2017) “Product Choice and Price Discrimination in Markets with Search Costs,” Working Paper.
- Gomes, R., J.-M. Lozachmeur and L. Maestri (2018) “Price Discrimination in Oligopoly: Brand Preferences and Quality Provision,” Working Paper.
- Stole, L. (2007) “Price Discrimination and Competition.” In: *Handbook of Industrial Organization*, vol. 3 (eds. M. Armstrong and R. Porter), North-Holland.

- Yang, H., and L. Ye (2008) “Nonlinear Pricing, Market Coverage and Competition,” *Theoretical Economics*, 3: 123-153.
- Bernheim, D., and M. Whinston (1998) “Exclusive Dealing,” *Journal of Political Economy*, 106(1): 64-103.
- Jullien, B., (2000) “Participation Constraints in Adverse Selection Models,” *Journal of Economic Theory*, 93(1): 1-47.
- Yehezkel, Y., (2008) “Retailers’ Choice of Product Variety and Exclusive Dealing under Asymmetric Information,” *RAND Journal of Economics*, 39(1): 115-43.
- Ide, E., J.-P. Montero, and N. Figueroa (2016) “Discounts as a Barrier to Entry,” *American Economic Review*, 106(7): 1849-1877.

Competition in Taxes and Provision of Public Goods

- *Lehmann, E., L. Simula and A. Trannoy (2014) “Tax me if you can! Optimal income tax between competing governments,” *Quarterly Journal of Economics*, 129(4): 1995-2030.
- *Jehiel, P. and L. Lamy (2018) “A Mechanism Design Approach to the Tiebout Hypothesis,” *Journal of Political Economy*, 126(2): 735-760.
- Simula, L., and A. Trannoy (2010) “Optimal Income Tax under the Threat of Migration by Top-Income Earners,” *Journal of Public Economics*, 94: 163-173.
- Bierbrauer, F., C. Brett, and J. A. Weymark (2013) “Strategic Nonlinear Income Tax Competition with Perfect Labor Mobility,” *Games and Economic Behavior*, 82: 292-311.
- Morelli, M., H. Yang, and L. Ye (2012) “Competitive Nonlinear Taxation and Constitutional Choice,” *American Economic Journal: Microeconomics*, 4: 142-175.

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