The Ohio State University Department of Economics Econ 8818—Economics of Information

Syllabus and Reading List

Professor James Peck Spring Semester, 2016 PAES Building A105 M,W,F 11:30-1:35, January 11 – February 26

Course Objectives: This course will provide you with useful tools for understanding current research and performing your own research on theoretical economic models with asymmetric information. We will go over articles on a wide range of information-related topics.

Course Requirements: Students are required to present one of the papers to the class, which will make up 45% of the final grade. Presentation papers must be approved by me. Secondly, students are required to write a short referee's report (3-5 pages, on a paper that was not presented in class) or a research proposal (3-5 pages), which will also make up 45% of the final grade. The remaining 10% will be based on attendance and participation.

1. Preliminaries

Modeling information structures, comparing information structures, Blackwell's theorem.

- Blackwell, D. (1951), "Comparison of Experiments," Proceedings of the Second Berkeley Symposium on Mathematical Statistics and Probability, University of California Press, 93-102.
- Cremer, J. (1982), "A Simple Proof of Blackwell's 'Comparison of Experiments' Theorem," Journal of Economic Theory 27, 439-443.
- 2. Walrasian Rational Expectations Models
- *Radner, R., "Rational Expectations Equilibrium: Generic Existence and the Information Revealed by Prices," *Econometrica*, 47 (1979), 655-678.
- *Grossman, S. and J. Stiglitz, "On the impossibility of informationally efficient markets," *AER*, Vol. 70, 1980, 393-408.

- 3. Rational Expectations with Explicit Price Formation
- *Dubey, P., J. Geanakoplos, and M. Shubik, "Revelation of Information in Strategic Market Games: A Critique of Rational Expectations Equilibrium," *J. Math. Econ.*, 1987, 105-137.
- Milgrom, P., "Rational Expectations, Information Acquisition, and Competitive Bidding," *Econometrica*, 49, 1981, 921-943.
- *Peck, J., "A Battle of Informed Traders and the Market Game Foundations for Rational Expectations Equilibrium," *Games and Economic Behavior* 88 (2014), 153-173.
- 4. Speculation and Asset Markets
- *Milgrom, P. and N. Stokey, "Information, Trade, and Common Knowledge," *J. Econ. Theory*, 26, 1982, 17-27.
- *Tirole, J., "On the possibility of speculation under rational expectations," *Econometrica* 50 1982, 1163-1181.
- Morris, S., "Trade with Heterogeneous Prior Beliefs and Asymmetric Information," *Econometrica*, Vol. 62, No. 6, 1994, 1327-1348.
- Kyle, A. S., "Informed speculation with imperfect competition," *Rev. Econ. Studies*, 56 (1989), 317-355.
- Jackson, M. and J. Peck, "Speculation and Price Fluctuations with Private, Extrinsic Signals," *J. Econ. Theory*, 55, 1991, 274-295.

5. Mechanism Design

- *Myerson, R., and M. Satterthwaite, "Efficient Mechanisms for Bilateral Trading," *Journal of Economic Theory*, 29, 1983, 265-281.
- Cremer, J. and R. McLean, "Full Extraction of the Surplus in Bayesian and Dominant Strategy Auctions," *Econometrica* (1988), 56, 1247-1257.
- Bergemann, D. and S. Morris, "Robust Mechanism Design," *Econometrica* (2005), 1771-1813.

- Myerson, R., "Optimal Auction Design," *Mathematics of Operations Research* 6 (1981), 58-73.
- Jackson, M.O. and H. Sonnenschein, "Overcoming Incentive Constraints," *Econometrica* 75(1), 2007, 241-258.
- Athey, S. and Segal, I. (2013), "An Efficient Dynamic Mechanism," *Econometrica*, 81: 2463–2485.
- Peters, M. and S. Severinov (1997), "Competition Among Sellers Who Offer Auctions Instead of Prices," *Journal of Economic Theory* 75, 141-179.
- Peters, M. and B. Szentes (2012), "Definable and Contractible Contracts," *Econometrica* 80(1), 363-411.
- *Peck, J., "Ski-Lift Pricing with Imperfect Competition: An Exercise in Competing Mechanisms," Ohio State working paper, August 6, 2015.

6. Industrial Organization

- Vives, X., "Aggregation of Information in Large Cournot Markets," *Econometrica* 56 (1988), 851-876.
- Reynolds, S. and B. J. Wilson, "Bertrand-Edgeworth Competition, Demand Uncertainty, and Asymmetric Outcomes," *Journal of Economic Theory*, vol. 92, no. 1 (May 2000).
- Bergemann, D. and J. Valimaki, "Learning and Strategic Pricing," *Econometrica* 64(5), 1996, 1125-1149.
- *Deneckere, R. and J. Peck, "Dynamic Competition with Random Demand and Costless Search: A Theory of Price Posting," *Econometrica*, Vol. 80, No. 3 (May 2012), 1185-1247.
- Horner, J. and L. Samuelson, "Managing Strategic Buyers," *Journal of Political Economy* 119(3) (2011), 379-425.

*Burdett, K. and K. Judd, "Equilibrium Price Dispersion," *Econometrica*, 1983, 955-969.

7. Timing Games.

- *Bulow, J. and P. Klemperer, "Rational frenzies and crashes," *J. Polit. Econ.*, 102 (1), 1994, 1-23.
- *Chamley, C. and D. Gale, "Information Revelation and Strategic Delay in a Model of Investment," *Econometrica* 62 (1994), 1065-1085.
- Bulow, J. and P. Klemperer, "The Generalized War of Attrition," *American Economic Review* 89 (1999), 175-189.
- Dan Levin and James Peck, "Investment Dynamics with Common and Private Values," *Journal of Economic Theory* 143(1), 2008, 114-139.
- Dan Levin and James Peck, "To Grab for the Market or to Bide One's Time: A Dynamic Model of Entry," *RAND Journal of Economics*, Vol. 34, No. 3, Autumn 2003, 536-556.
- *Smith, L. and P. Sorensen, "Pathological Outcomes of Observational Learning," *Econometrica* 68(2), 2000, 371-398.
- *Peck, J. and H. Yang, "Investment Cycles, Strategic Delay, and Self-Reversing Cascades," *International Economic Review*, 52(1), 2011, 259-280.
- Callander, S. and J. Horner, "The Wisdom of the Minority," *Journal of Economic Theory*, 2009, 1421-1439.
- *Diamond, D. W. and P. H. Dybvig, "Bank runs, deposit insurance, and liquidity," *Journal* of Political Economy 91, 1983, 401-419.
- Peck, J. and K. Shell, "Equilibrium Bank Runs," *Journal of Political Economy*, 111(1), February 2003, 103-123.
- *Ennis, H.M. and T. Keister, "Run equilibria in the Green-Lin model of financial intermediation," *Journal of Economic Theory*, 2009, 1996-2020.
- Che, Y.-K. and J. Horner, "Optimal Design for Social Learning," April 2014 working paper.
- *Bikhchandani, S., D. Hirshleifer, and I. Welch, "A Theory of Fads, Custom, and Cultural Change as Informational Cascades," *Journal of Political Economy*, Vol. 100 No. 5 (October 1992), 992-1026.
- *Banerjee, A., "The Economics of Rumours," Rev. Econ. Studies, 1993, 309-328.
- *Peck, J., "Temporary Boycotts as Self-Fulfilling Disruptions of Markets," Ohio State working paper, October 12, 2015.

- 8. Bargaining with Imperfect Information.
- Ausubel, L. M. and R. Deneckere, "Durable Goods Monopoly with Incomplete Information," *Review of Economic Studies* 59 (1992), 795-812.
- Gul, F., H. Sonnenschein, and R. Wilson, "Foundations of Dynamic Monopoly and the Coase Conjecture," *Journal of Economic Theory* 39 (1986), 155-190.
- Horner, J. and N. Vieille, "Public vs. Private Offers in the Market for Lemons," *Econometrica*, 2009, 29-70.
- 9. Sender-Receiver Games.
- Crawford, V. P. and J. Sobel, "Strategic Information Transmission," *Econometrica* 50(6), 1982, 1431-1451.
- Battaglini, M., "Multiple Referrals and Multidimensional Cheap Talk," *Econometrica* 70(4), 2002, 1379-1401.
- Krishna, V. and J. Morgan, "A Model of Expertise," *Quarterly Journal of Economics* 116(2), 2001, 747-775.
- Chakraborty, A. and Harbaugh, R., "Comparative Cheap Talk," *Journal of Economic Theory* 132 (2007), 70-94.
- Chakraborty, A. and Harbaugh, R., "Persuasion by Cheap Talk," *American Economic Review* 100(5), 2010, 2361-82.
- Fortnow, L. and Vohra, R., "The Complexity of Testing Forecasts," *Econometrica*, vol. 77 (2009), 93-105.
- Li, Z., H. Rantakari, and H. Yang, "Competitive Cheap Talk," (2014), Working Paper.
- 10. Repeated and Multi-stage Games with Imperfect Information
- Abreu, D., D. Pearce, and E. Stacchetti, "Toward a Theory of Discounted Repeated Games with Imperfect Monitoring, *Econometrica* 58(5), September 1990, 1041-1063.
- Cripps, M. W., G. Mailath, and L. Samuelson, "Imperfect Monitoring and Impermanent Reputations," *Econometrica*, March 2004, 407-432.

- Fudenberg, D. and D. K. Levine, "Maintaining a Reputation when Strategies are Imperfectly Observed," *Review of Economic Studies* 1992, 561-579.
- *Bagwell, K., "Commitment and Observability in Games," *Games and Economic Behavior*, February 1995, Vol. 8, Number 2, 271-280.

11. Political Economy

- Feddersen, T. J. and W. Pesendorfer, "The Swing Voter's Curse," *American Economic Review*, Vol. 86 No. 3, 1996, 408-424.
- Damiano, E., Li, Hao, and Suen, W., "Sincere Voting in Large Elections," May 2011 UBC working paper.
- Krishna, V. J. and J. Morgan, "Overcoming Ideological Bias in Elections," *Journal of Political Economy* 119, (2011), 183-211.

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <u>http://www.ods.ohio-state.edu/</u>