

ECON 7111 - Industrial Organization I: Theoretical Approach

Fall 2015

Basic

Information

Instructor: Byung-Cheol Kim (byung-cheol.kim@econ.gatech.edu)

Office: Old CE room 324

Class: 5:05pm – 7:55pm Thursday / Old CE 310

Office Hours: TR 3:30-5:00 pm

Description

This course is the first half of the graduate IO sequence. It deals with mainly theoretical issues but we will discuss related empirical papers as well.

Textbooks

The following book has been ordered for this course:

Tirole, J., *The Theory of Industrial Organization*, MIT Press, 1988.

This is a standard graduate textbook in IO and provides a nice introduction of much of the material to be covered. In the class, we will concentrate on theoretical principles. For those who are interested in antitrust (competition policy) issues, the following books are highly recommended:

Motta, M., *Competition Policy: Theory and Practice*, Cambridge University Press, 2004.

Whinston, M., *Lectures on Antitrust Economics*, MIT Press, 2006.

Unfortunately, Tirole (1988) is not updated since its first edition. We will use *the Handbook of IO* to cover more recent developments of IO theories.

Handbook of Industrial Organization, Volume III, Edited by Mark Armstrong and Robert Porter, Elsevier, 2007. (HIO)

For game theory texts, I suggest

Gibbons, M. *Game Theory for Applied Economists*, 1992

Finally, regarding studies on theories of incentives and of contracts, we will use

Jean-Jacques Laffont, David Martimort, *The Theory of Incentives: The Principal-Agent Model*, Princeton University Press, 2001.

Patrick Bolton and Mathias Dewatripont, *Contract Theory*, MIT Press, 2004.

- Web Site:** It is recommended to check the course web page, <https://tsquare.gatech.edu/>, at least twice a week. All important announcements and course materials such as homework assignments and solutions will be available there.
- Grade** Course grades will be based on class presentations (20%), homework (20%), one midterm (30%, take-home) and the final exam (30%, in class).
- Topics** Below are *tentative* topics to be discussed in class. However, we may change topics as we proceed. Since this course is designed to help students choose dissertation topics, I am willing to accommodate topics of interests to students. Please make suggestions if there are any special topics you would like to see in class. You are urged to read all following papers.

I. Topics under Monopoly

Tirole (1988) Chapter 1.

Bulow, J., "Durable Goods Monopolists," *Journal of Political Economy*, 1982, pp.314-332.

_____, "An Economic Theory of Planned Obsolescence," *Quarterly Journal of Economics*, 1986, pp.729-750.

Waldman, M., "A New Perspective on Planned Obsolescence," *Quarterly Journal of Economics* (108), 1993, pp. 273-284.

Choi, J., "Network Externality, Compatibility Choice, and Planned Obsolescence," *Journal of Industrial Economics*, 1994, pp. 167-182.

Hendel, I. and Lizzeri, A., "Adverse Selection in Durable Goods Markets," *American Economic Review*, 1999, pp. 1097-1115.

Various Price Discriminations

Acquisti, A. and Varian, H., "Conditioning Prices on Purchase History," *Marketing Science* 24(3), 2004: 367-381.

Taylor, C., "'Consumer Privacy and the Market for Customer Information," *Rand Journal of Economics*, Winter 2004, 35, 631--51.

Rhodes A. and Wilson C.M. "False Advertising and Consumer Protection Policy" WP, 2015.

II. Entry, Exit, and Strategic Behavior

Tirole Chapter 8.

Bulow, J., Geanakoplos, J., Klemperer, P., "Multimarket Oligopoly: Strategic Substitutes and Complements," *Journal of Political Economy* (93), 1985, pp.488-511.

Fudenberg, D. and Tirole, J., "The Fat Cat Effect, the Puppy Dog Ploy and the Lean and hungry Look," *American Economic Review: Papers and Proceedings* (74), May 1984, pp.361-368.

Bolton, P. and Scharfstein, D., "A Theory of Predation Based on Agency Problems in Financial Contracting," *American Economic Review* (80), March 1990, pp. 93-106.

Fershtman, C. and Judd, K., "Equilibrium Incentives in Oligopoly," *American Economic Review*, 1986, 971-983.

Aghion, P. and Bolton, P., "Contracts as a Barrier to Entry," *American Economic Review* (77), 1987, pp.388-401.

Rey, P. and Tirole, J., "A Primer on Foreclosure," *Handbook of industrial organization* 3 (2007): 2145-2220..

Whinston, Michael D., "Tying, Foreclosure, and Exclusion," *American Economic Review* (80) 1991, pp. 837-859.

Choi, J. P. and Stefanadis, C., "Tying, Investment and the Dynamic Leverage Theory," *Rand Journal of Economics*, Spring 2001, 52-71.

Carlton, Dennis, W. and Michael Waldman. "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries," *Rand Journal of Economics*, Summer 2002, pp. 194-220.

III. Two-Sided Markets

Armstrong, M., "Competition in Two-Sided Markets," *Rand Journal of Economics*, 2006, pp.668-691.

Rochet, J-C. and Tirole, J., "Two-Sided Markets: A Progress Report," *Rand Journal of Economics*, 2006, pp. 645-667.

Caillaud, Bernard and Bruno Jullien, "Chicken and Egg: Competition among Intermediation Service Providers," *Rand Journal of Economics*, Summer 2003, pp. 309-328.

Weyl, E. Glen, "A Price Theory of Multi-Sided Platforms," *American Economic Review*, 2010, pp. 1642-1672.

White, A. and Weyl G., "Insulated Platform Competition," WP, 2015

Choi, J.P. and B-C. Kim. "Net Neutrality and Investment Incentives." *Rand Journal of Economics*, Vol. 41(3), 2010, pp. 446-471.

Economides, N. and B. Hermalin. "The Economics of Network Neutrality." *Rand Journal of Economics*, Vol. 43(4), 2012, pp. 602-629

Economides, N. and B. Hermalin. 2015 "The Strategic Use of Download Limits by a Monopoly Platform." *Rand Journal of Economics*, Vol. 46(2), pp.297-327.

Choi, Jay Pil, Doh-Shin Jeon, Byung-Cheol Kim. "Net Neutrality, Business Models and Internet Interconnection" *American Economic Journal: Microeconomics* 2015, 7(3): 1–39 <http://dx.doi.org/10.1257/mic.20130162>

Johnson, Justion P., 2013. "Targeted advertising and advertising avoidance" *RAND Journal of Economics* 44(1): 128-144

IV. Behavioral Industrial Organization

Spiegler, Ran. *Bounded Rationality and Industrial Organization*, Oxford University Press, 2011.

Ellison, Glenn, “Bounded Rationality in Industrial Organization,” in: *Advances in Economics and Econometrics: Theory and Applications*, Ninth World Congress (2), eds: Richard Blundell, Whitney K. Newey, Torsten Persson, Cambridge University Press, 2006

Gabaix, Xavier, and David Laibson, “Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets.” *Quarterly Journal of Economics*, 121(2): 505–40, 2006

DellaVigna, S. and Malmendier, U., “Contract Design and Self Control: Theory and Evidence,” *Quarterly Journal of Economics* 119, 353–402, 2004.

DellaVigna, S. and Malmendier, U., 2006, “Paying Not to Go to the Gym,” *American Economic Review*, 96(3):694–719, 2006.

Heidhues, P. and Koszegi, B., 2010, Exploiting Naivete about Self-Control in the Credit Market, *American Economic Review*, 100(5): 2279–2303, 2010.

Grubb, Michael, “Selling to Overconfident Consumers,” *American Economic Review*, 99(5), pp. 1770-1807, 2009.

Grubb, Michael, “Consumer Inattention and Bill-Shock Regulation,” *Review of Economics Studies* (2014) doi: 10.1093/restud/rdu024

V. Technological Competition and Intellectual Property Rights

Tirole (1988) Chapter 10.

Fudenberg, D., and Tirole, J., "Preemption and Rent Equalization in the Adoption of New Technology," *Review of Economic Studies* (52), 1985, pp.383-401.

_____, "Understanding Rent dissipation: On the Use of Game Theory in Industrial Organization," *American Economic Review: Papers and Proceedings* (77), May 1987, 176-183.

Gallini, N., "Deterrence through Market Sharing: A Strategic Incentive for Licensing," *American Economic Review* (74), 1984, pp. 931-941.

Shepard, A., "Licensing to Enhance Demand for New Technologies," *Rand Journal of Economics* (18), Autumn 1987, pp.360-368.

Farrell, J. and Gallini, N., "Second Sourcing as a Commitment: Monopoly Incentives to Attract Competition," *Quarterly Journal of Economics* (108), 1988, pp.673-694.

Katz, M. and Shapiro, C. "Perfect Equilibrium in a Development Game with Licensing or Imitation," *American economic Review* (77), June 1987, pp. 402-420.

_____, "How to License Intangible Property," *Quarterly Journal of Economics* (101), 1986, pp.567-590.

Bessen, James and Eric Maskin, "Sequential Innovation, Patents, and Imitation," *Rand Journal of Economics*, 2009, pp. 611-635.

Farrell, J. and Shapiro, C., "How Strong are Weak Patents?" *American Economic Review*, 2008, pp. 1347-1369..

Stein, J. "Conversation among Competitors," *American Economic Review*, 2008, pp. 2150-2162.

Lerner, Josh and Tirole, Jean, "Efficient Patent Pools," *American Economic Review*, June 2004, 691-711.

Shapiro, Carl, "Antitrust Limits to Patent Settlements," *Rand Journal of Economics*, 2003, pp. 391-411.

Cardon, J. H. and Sasaki, D., "Preemptive Search and R&D Clustering," *Rand Journal of Economics*, 1998, pp. 323-338.