

## Syllabus Econ 845, Industrial Organization

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Class: Mondays, 8:30 a.m.-10:00 a.m., Thursdays, 10:00 a.m.-11:30 a.m. MacCorry A516

Office Hours: Mondays, 10:00 a.m.-12:00 a.m.

### Grading Policy

Problem sets (30 %)

Mid-term exam (25 %)

Final exam (45 %)

This course discusses several topics in empirical industrial organization, such as hedonic analysis, differentiated goods market, static and dynamic oligopoly, marketing models, and productivity, and price discrimination.

Lecture notes will be made available on the web.

### Statement on Academic Integrity

Academic integrity is constituted by five core fundamental values of honesty, trust, fairness, respect and responsibility (see [www.academicintegrity.org](http://www.academicintegrity.org)). These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the Senate Report on Principles and Priorities). Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity.

Information on academic integrity is available in the Arts and Science Calendar (see Academic Regulation 1), on the Arts and Science website (<http://www.queensu.ca/calendars/artsci/pg532.html>), and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

## Tentative Reading List

### Measuring Market Power:

- Reiss, Peter C and Frank A. Wolak (2006), "Structural Econometric Modeling: Rationales and Examples from Industrial Organization," forthcoming in Handbook of Econometrics (<http://www.stanford.edu/preiss>)
- Bresnahan, Timothy F. (1982), "The Oligopoly Solution Concept is Identified," *Economic Letters*, 10, 87-92
- Bresnahan, Timothy F. (1989), "Empirical Studies of Industries with Market Power," *Handbook of Industrial Organization*, vol. 2, 1011-1057
- Bresnahan, Timothy F (1987), "Competition and Collusion in the American Automobile Industry: The 1955 Price War," *Journal of Industrial Economics*, 35(4), 457-82
- Genesove, David and Wallace P. Mullin (1998), "Testing Static Oligopoly Models: Conduct and Cost in the Sugar Industry, 1890-1914," *RAND Journal of Economics*, 29(2), 355-377
- Wolfram, Catherine (1999), "Measuring Duopoly Power in the British Electricity Spot Market," *American Economic Review*, 89(3), 805-826
- Corts, Kenneth S. (1999), "Conduct Parameters and Measurement of Market Power," *Journal of Econometrics*, 88(2), 227-250

### Dynamic oligopoly:

- Hansen L. (1982) "Large Sample Properties of Generalized Method of Moments Estimators," *Econometrica*, 50, 1029-1054
- Lee Lung-Fei and Robert Porter (1984) "Switching Regression Models with Imperfect Sample Separation Information-With an Application on Cartel Stability", *Econometrica*, 52, pp. 391-418
- Porter, R. (1983) "A Study of Cartel Stability: The Joint Executive Committee," *Bell Journal of Economics*, pp. 301-314
- Ellison, G. (1994) "Theories of Cartel Stability and the Joint Executive Committee," *RAND Journal of Economics*, pp. 37-57
- Roller, L.-H. and F. Steen (2006) "On the workings of a cartel: Evidence from the norwegian cement industry." *American Economic Review* 96 (1), 321-338.
- Genesove, D. and W. P. Mullin (2001, Jun.). Rules, communication, and collusion: Narrative evidence from the sugar institute case. *American Economic Review* 91 (3), 379-398

### Entry and Exit:

- Berry, S. (1992) "Estimation of a Model of Entry in the Airline Industry," *Econometrica*, pp. 889-918
- Bresnahan and Reiss (1990), "Entry in Monopoly Markets," *Review of Economic Studies*, pp. 531-553.
- Bresnahan and Reiss (1991) "Entry and Competition in Concentrated Markets," *Journal of Political Economy*.
- Berry and Reiss (2007) "Empirical Model of Market Entry and Market Structure," *Handbook of Industrial Organization*.
- Syverson C. (2004) "Market Structure and Productivity: A Concrete Example," *Journal of Political Economy*, Vol. 112, No. 6 (Dec., 2004), pp. 1181-1222

Dunne, T, M. Roberts and L. Samuelson (1989), "The Growth and Failure of U.S. Manufacturing Plants," *Quarterly Journal of Economics*, 104 (4), pp. 671-698.

### **Production Function and Investment Estimation:**

Gollop, Frank and Mark Roberts: (1983) "Environmental Regulation and Productivity Growth: The Case of Fossil Fueled Electrical Power Plant", *Journal of Political Economy*, vol. 91, pp. 654-674

Steven Olley and Ariel Pakes (1996), "The Dynamics of Productivity in the Telecommunications Equipment Industry", *Econometrica*, 64. pp. 1263-1297

John Rust (1987): "Optimal Replacement of GMC Bus Engines: An Empirical Model of Harold Zurcher", *Econometrica*, vol. 55, pp. 999-1033

John Rust: "Optimal Response to a Shift in Regime: The Case of the U.S. Nuclear Power Industry", *Journal of Applied Econometrics*, vol. 10. pp. 75-118.

### **Hedonic Analysis:**

Epple, Dennis (1987): "Hedonic Prices in Implicit Markets: Estimating Supply and Demand Parameters for Differentiated Products", *Journal of Political Economy*, 95, pp. 59-80

Bartik, Timothy (1987) "The Estimation of Demand Parameters in Hedonic Price Models", *Journal of Political Economy*, 95, pp. 81-88

Rosen, Sherwin (1974): "Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition", *Journal of Political Economy*, 82, pp. 34-55

### **Contracts:**

Akerberg and Botticini (2002) "Endogenous Matching and the Empirical Determinants of Contractual Form", *Journal of Political Economy*

Chiappori and Salanie (2000) "Testing for Asymmetric Information on Insurance Markets" *Journal of Political Economy*.

### **Auctions:**

Hendricks, Kenneth and Porter, Robert H (1988), "An Empirical Study of an Auction with Asymmetric Information," *American Economic Review*, 78(5), 865-83

Paarsch, Harry J. (1992), "Deciding between the common and private value paradigms in empirical models of auctions," *Journal of Econometrics*, 51(1-2), 191-215

Donald, Stephen G and Paarsch, Harry J. (1993), "Piecewise Pseudo-maximum Likelihood Estimation in Empirical Models of Auctions," *International Economic Review*, 34(1), 121-48

Laffont, Jean-Jacques, Herve Ossard, Quang Vuong (1995), "Econometrics of First-Price Auctions," *Econometrica*, 63(4), 953-980

Paarsch, Harry J. (1997), "Deriving an estimate of the optimal reserve price: An application to British Columbian timber sales," *Journal of Econometrics*, 78(2), 333-357

Guerre, Emmanuel, Isabelle Perrigne, Quang Vuong (2000), "Optimal Nonparametric Estimation of First-price Auctions" *Econometrica*, 68 (3), 525-574

Hendricks, Kenneth, Joris Pinkse, and Robert H. Porter (2003), "Empirical Implications of Equilibrium Bidding in First-Price, Symmetric, Common Value Auctions," *Review of Economic Studies*, 70(1), 115-145

Haile, Philip A. and Elie Tamer (2003), "Inference with an Incomplete Model of English Auctions," *Journal of Political Economy*, 111(1), 1-51

Athey, Susan and Philip A. Haile (2006), "Empirical Models of Auctions," Cowles Foundation Discussion Papers 1562, Cowles Foundation, Yale University

### **Price Discrimination:**

Goldberg, (1996) "Dealer Price Discrimination in New Car Purchases: Evidence from the Consumer Expenditure Survey," *Journal of Political Economy*, pp. 622-654

Graddy, (1995) "Testing for Imperfect Competition at the Fulton Fish Market," *RAND Journal of Economics*, 62-75