

ECON 8757-001 INDUSTRIAL ORGANIZATION AND PUBLIC POLICY

Empirical Methods in Industrial Organization

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 Office hours: M 2-4pm, W 2-3pm, or by appointment
 Class time and location: MW 11am-12.15pm, ECON 5

Course Description

Industrial Organization (IO) studies how firms interact with rivals, consumers, and policy makers when the assumptions of perfect competition do not typically hold. The primary focus of the course is on the empirical methods used to study IO questions. The course introduces you to some of the empirical methods used to study IO questions. The course focuses on important questions in IO, and the use of econometrics for descriptive analysis, examining the predictions of IO theories, and estimating structural parameters. The course will be taught with formal lectures, the discussion of academic papers that emphasize relevant empirical issues and methods, and with regular problem sets in applied econometrics and empirical IO.

Class requirements

The class meets Monday and Wednesday from 11am to 12.15pm. You are required to keep up with the weekly course readings and come to class prepared for lectures and the discussion of material with your class mates.

Assessment

Your final grade will be based on the following assessments: class preparation (35 percent); problem sets (35 percent); and exams (30 percent).

Class preparation We will discuss about a dozen papers during the semester. I will nominate appropriate papers from the Reading List below as we proceed through the course. Please read the assigned paper each week and come to class prepared for discussion. To help you organize your thoughts, please prepare a one to two page summary of the paper (no more than two pages) and

Greene, W. 2012. *Econometric Analysis*, 7th edition (any previous addition will suffice).

- Griliches, Z., and Jacques, M. 1973. "The Identification of Production Functions Using Inputs to Control for Unobservables," *Review of Economic Studies* 40(2), 317-342.
- Levinsohn, J., and Petrin, A. 2003. "Estimation of Production Functions using Inputs to Control for Unobservables," *Review of Economic Studies* 70(2), 317-342.
- Olley, S., and Pakes, A. 1996. "The Dynamics of Productivity in the Telecommunications Equipment Industry," *Econometrica* 64(6), 1263-97.
- Shin, R., and Ying, J., 1992. "Unnatural Monopolies in Local Telephone," *RAND Journal of Economics* 23, 171-183.
- Thorton, R., and Thompson, P. 2001. "Exploration of Learning and Spillovers in Wartime Shipbuilding," *American Economic Review* 91(5), 1350-1368.

Consumer Demand

- Akerberg, D., Riordan, M., Rosston, G., and Wimmer, B. 2014. "Estimating the Impact of Low-Income Interactions on Industrial Organization," *Journal of Economic Surveys* 37, 84-98.
- Berry, S. 1994. "Estimating Discrete Choice Models of Product Differentiation," *Rand Journal of Economics* 25, 242-262.

Conduct in Differentiated Products Markets

- Berry, S., Levinsohn, J., and Pakes, A. 1995. "Differentiated Products and Market Power." *Econometrica* 63(July), 841-990.
- Bresnahan, T. 1987. "Competition and Collusion in the American Automobile Industry: The 1955 Price War." *The Journal of Industrial Economics* 35(4): 457-482.
- Mazzeo, M. 2001. "Differentiated Oligopoly." *The Review of Economics and Statistics* 84(4), 716-728.
- Nevo, A. 2000. "Differentiated Products and Market Power." *The Journal of Economics and Management Strategy* 9(4), 513-548.
- Nevo, A. 2001. "Differentiated Products and Market Power." *Econometrica* 69(2), 307-322.
- Petrin, A., and Goolsbee, A. 2004. "Differentiated Oligopoly." *The Journal of Political Economy* 112(5), 1011-1041.
- Petrin, A., and Train, K. 2010. "A Control Function Approach to Endogeneity in Differentiated Oligopoly." *Journal of Marketing Research* 47(1), 3-13.

Market Entry and Competition

- Berry, S., and Waldfogel, J. 1999. "Free Entry and Social Inefficiency in Radio Broadcasting." *Rand Journal of Economics* 30(3), 397-420.
- Bresnahan, T., and Reiss, P. 1991. "Entry and Competition in Concentrated Markets." *Journal of Political Economy* 99(5), pp. 977-1009.
- Bresnahan, T., and Reiss, P. 1990. "Entry and Competition in Concentrated Markets." *Review of Economics and Statistics* 72(4), 531-553.
- Goolsbee, A., and Syverson, C. 2008. "How Do Incumbents Respond to the Threat of Entry? Evidence from the US." *Journal of Economic Perspectives* 22(4), 133-154.

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 Quarterly Journal of Economics 126(3), 1539-1591.
- Molnar, G., and Savage, S. 2014 Market Structure and Broadband Performance, '
 Mimeo, University of Colorado at Boulder (see me for most recent draft).
- 2 OLYDUHV 0 DQG &DFKRQ * 3 & RPSHWLWLRQ J 5HWDLOH
 , QYHVWLJDWLRQ RI *HQHUDO 0RWRUV, Management Science
 Science 55(9), 1586-1604.
- Prince, J., and Simon, D. 2014 Do Incumbents Improve Service Quality in Response to
 Entry? Evidence from Airlines On-Time Performance, 'forthcoming, Management
 Science
- : DWVRQ 5 3 3URGXFW 9DULHW\ DQG & RPSHWLWLRQ L
 The Journal of Industrial Economics 57(2), 217-251.

Campus policies

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, SROLWLFV YHWHUDQ¶V VWDWXV VH[XDO RULHQWDWLRQ expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at <http://www.colorado.edu/policies/classbehavior.html> and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code.

The University of Colorado at Boulder policy on Discrimination and Harassment, the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships apply to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of discrimination or harassment based upon race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Judicial Affairs at 303-492-5550. Information about the ODH, the above referenced policies and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>.

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to

can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>.

If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see Temporary Injuries under Quick Links at [Disability Services website](#) and discuss your needs with your professor.

Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, please indicate by email, before the end of week two, if there is a conflict. See full details at http://www.colorado.edu/policies/fac_relig.html.

Guide to reading papers for class discussion

We will discuss about a dozen papers during the semester. Please prepare a one to two page summary for the designated paper that considers the following questions:

1. What is the research question and why is it interesting?
2. What theory is related to the