“If you torture the data enough, nature will always confess.” Ronald Coase

“Make everything as simple as possible, but not simpler.” Albert Einstein

The objective of this course is to introduce students to major themes in empirical industrial organization (IO) research. The course is intended to complement earlier, more theoretical studies in ResEcon 732. The course will require students to have a firm grasp of both applied microeconomic theory and graduate level econometrics. In addition, students will need familiarity with modern econometric/statistical software in order to complete some of the assignments.

In the past decade, much has been made about the prominence of “structural econometrics” in empirical IO research. This course will provide students with an introduction to this so-called “New Empirical Industrial Organization” research. However, the course will also cover other types of empirical studies. In all cases, the discussed empirical research will explicitly refer to relevant microeconomic theory – the “econ” in econometrics.

Readings: There are no textbooks for this course. Readings will consist of select journal articles and working papers. That said, there are several articles, primarily in Handbooks, that provide an overarching discussion of much of the relevant reading

- “Structural Econometric Modeling: Rationales and Examples from Industrial Organization” by Peter Reiss & Frank Wolak, Handbook of Econometrics, Volume 6A, Chapter 64, 2007
Grading: Course grade will depend on [1] class participation (20%) [2] assignments and quizzes (50%) [3] final exam (30%). (%) are subject to change. Details provided in class later.

Course Outline
PRELIMINARY – SUBJECT TO CHANGE

1. Market Analysis

1.1 Estimating Cost / Production Functions
- Flexible functional forms (translog): Christensen & Greene (1976)
- Specifying the stochastic element: McElroy (1987)
- Challenges: Griliches & Mairesse (1995)

1.2 Estimating Demand

1.3 Static Oligopoly
- Identification: Bresnahan (1982)
- Conduct parameters revisited: Corts (1998)

1.4 Welfare Analysis

1.5 Dynamic Oligopoly
- Dynamic pricing: Borenstein & Shepard (1996)
- Multi-market contact: Evans & Kessides (1994)
- Focal points: Knittel & Stango (2003)
2. Firm Conduct

2.1 Price Discrimination
- Racial/Gender: Goldberg (1996)
- Search costs: Sorenson (2000)

2.2 Entry & Exit
- One-shot models: Bresnahan & Reiss (1991), Berry (1992)
- Welfare: Berry & Waldfogel (1999)
- Differentiated products: Mazzeo (2002), Seim (2005), Davis (2006)
- Multiple equilibria: Ciliberto & Tamer (2009),
- Entry Deterrence: Goolsbee & Syverson (2008), Ellison & Ellison (2011)

2.3 Information
- Advertising: Milyo & Waldfogel (1999), Ackerberg (2001)

*** BElow contingent on time available ***

2.4 Investment
- Single Agent: Rust (1987)
- Simulation: Pakes (1986)

3. Firm and Market Structure

3.1 Vertical Integration

3.2 Contracts and Restraints
- Specificity: Joskow (1987)

3.3 Standards & Network Externalities
- Standards: Postrel (1990)

3.4 Auctions – Probably skip given lack of earlier exposure