

**Econ 664: Industrial Organization**  
SPRING 2015

**Instructor:** Shakeeb Khan

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**Office Hours:** Wednesdays 10:00-11:00 AM

**Time and location:** T, TR 1:25-2:40 PM, Social Science 326

**Textbooks (Not required but useful references):**

*An Introduction to Industrial Organization*, L.Cabrel

*Industrial Organization- Contemporary Theory and Empirical Applications*, L. Pepall, D. Richards, G. Norman

*The Theory of Industrial Organization*, J. Tirole

**Course Pre/Co-requisites:** Econ 105D, Some Calculus

**Grading:** There will be bi-weekly assignments, 1 midterm exam (in class), a paper/report and a final. The paper/report will be a critical review of a published paper in empirical industrial organization. The published paper will be of your choosing, but I will also provide a list of papers if you need help in finding one. The paper/report will be about 5 pages and I will provide more guidance on what I am looking for. Furthermore, some of the problem sets will have questions that will get you started on critically evaluating papers in empirical io.

**Scheme:**

- Assignments - 20%
- Midterm Exams - 20%
- Paper/Report- 20%

- Final Exam - 40%

**Dates:**

- Assignments - Due at beginning of class, on specified date.
- Midterm Exams(In Class) - Last class before spring break 2015.
- Final Exam(In Class) - TBA.

### **Course Objectives**

This class will survey important topics in industrial organization. Industrial organization itself is the study of the ways firms compete with each other in markets and industries. The field is distinct from microeconomics for two main reasons 1)it studies firm strategies the depend on market interaction 2)it will consider market structures that are intermediate to the extremes of perfect competition and monopolies. After reviewing some of the basics in microeconomic theory, we will turn our focus on strategic interaction among firms in imperfectly competitive markets. Some of the topics we will elaborate on are oligopolies, collusion, and price discrimination. On the one hand, the analysis will be formal and rigorous, using and expanding upon concepts and methods for intermediate micro. On the other hand, we will also spend time on empirical examples, and there will be a distinct empirical component to the class.

### **Course Outline**(reading material in parentheses)

#### **1. Introduction/Review**

- (a) Definitions, concepts (C,PRN,Chapter 1)
- (b) Review of Micro (C, PRN, Chapters 2,3)

#### **2. Monopoly Power**

- (a) Price Discrimination (C Chapter 5, 10; PRN Chapters 5,6; T, Chapter 1,3)
- (b) Product Variety, Bundling (PRN, Chapters 7,8; T, Chapter 2.)

### **3. Oligopolies and Strategic Interaction**

- (a) Basics of (Static) Game Theory (C, Chapter 4, 7; PRN, Chapters 9,10; T, Chapter 5,11.1-11.4)
- (b) Dynamic Games (C, Chapter 8; PRN, Chapter 11; T, Chapter 6.1,6.2,8)

### **4. Anticompetitive Strategies**

- (a) Limit Pricing (PRN, Chapter 12; T, Chapter 9.4)
- (b) Predatory Behavior (PRN, Chapter 13; T, Chapter 9.4)
- (c) Repeated Games (PRN, Chapter 14; T, Chapter 6.3)
- (d) Collusion (C, Chapter 8; PRN, Chapter 14.3,14.4, 15; T, Chapter 9.3)

### **5. Contractual Relations**

- (a) Horizontal Mergers (C, 15.3, PRN, Chapter 16)
- (b) Vertical Integration (C, Chapter 11; PRN, Chapters 17-19; T, Chapter 4)

### **6. Product Differentiation and Nonprice Competition**

- (a) Spatial Competition (C, Chapter 12; T, Chapter 7.1);
- (b) Monopolistic Competition (C, Chapter 6.4; T, Chapter 7.2)
- (c) Advertising (C, Chapter 13; PRN, Chapter 20)
- (d) Research and Development (C, Chapter 16; PRN, Chapter 22; T, Chapter 10)

### **7. (Time Permitting) Networks and Auctions**

- (a) Networks (C, Chapter 17; PRN, Chapter 24)
- (b) Auctions (PRN, Chapter 25)