**ECONOMICS 2900: INDUSTRIAL ORGANIZATION (IO)**  
(Fall Semester: Monday’s 11:05 am to 12:45 pm, RT 147)

**Professor:** Frank Mathewson

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**Office Hours:** By Appointment

**Evaluation:** There will be a final exam (date to be determined) that will determine your grade in the course. Previous exams are posted on the course web site. Some problem sets will be distributed during the semester. While these will not be graded, answer templates will be posted.

**Other courses:** ECO 2901S (Winter Semester; IO, Friday 9 - 11) is offered by Professor Victor Aguirregabiria.  
**Bus Econ/IO Workshop:** students are encouraged to attend this workshop that typically meets at Rotman on Monday’s from 4:10 to 5:30 pm. Check seminar schedule for dates, room location, speakers and papers.

**Course Content:** The field of industrial organization is applied microeconomics/price theory concerned with the function of markets and the behavior of firms in these markets. In this course the focus is on two primary questions: (i) How do we explain observed behavior, prices or contractual practices by firms operating in markets that are not perfectly competitive? (ii) What is the role of government intervention in affecting market structure, the behavior of firms, and the efficient operation of markets? Recent developments in IO are both theoretical and empirical. This IO course stresses a basic understanding of the theory, including extensions and modern developments and applications of the theory; selected empirical applications will be presented in ECO 2404S and ECO 2901S.

**Text:** The Theory of Industrial Organization, by Jean Tirole, MIT Press, 1988 (Tirole) is the required text for the course. Additional readings are suggested.
**Supplementary Texts:**
Stigler, G. *The Organization of Industry*, U. Chicago Press, 1968 (S)

**Journal Abbreviations:**
AER - American Economic Review
AEJ:M - American Economic Journal: Microeconomics
ALJ - Antitrust Law Journal
BJE - Bell Journal of Economics
CJE - Canadian Journal of Economics
Ec - Economica
EER - European Economic Review
EI - Economic Inquiry
EJ - Economic Journal
EM - Econometrica
IJIO - International Journal of Industrial Organization
JB - Journal of Business
JEMS - Journal of Economics and Management Strategy
JEP - Journal of Economic Perspectives
JET - Journal of Economic Theory
JIE - Journal of Industrial Economics
JLaE - Journal of Labor Economics
JLE - Journal of Law and Economics
JLEO - Journal of Law, Economics and Organization
JPE - Journal of Political Economy
J Pub E - Journal of Public Economics
NBER - National Bureau of Economic Research
QJE - Quarterly Journal of Economics
RES - Review of Economic Studies
RIO - Review of Industrial Organization
RJE - Rand Journal of Economics.
I. INTRODUCTION TO INDUSTRIAL ORGANIZATION: THE QUESTIONS

Tirole: pps 1 – 15 and Ch. 5, pps 209 – 212.

SR: Chapter 1.

II THEOREY OF THE FIRM

Tirole: 15-60.


Milgrom, P. and J. Roberts Economics, Organization and Management, chs. 2 and 7.


Stigler, G. “The Division of Labor is Limited by the Extent of the Market,” in (S).


**Applications**


**III. THE THEORY OF MONOPOLY**

**Tirole:** Ch. 1, pp. 65 – 72; 73 – 78.


**A. Durable Goods Monopoly**

**Tirole:** Ch. 1: 72 – 73, 79 – 87.


B. Production Selection, Quality and Advertising

Tirole: Ch. 2


C. **Price Discrimination**

*Tirole*: Ch. 3: 133 -165.

*SR*: Ch. 12, 13


Stole, L “Price Discrimination and Competition,” Ch. 34, *Handbook 3*.


D. **Vertical Integration and Foreclosure**

*Tirole*: Ch. 4.

*SR*: Ch. 1


E. **Exclusive Dealing Contracts and Foreclosure**


F. **Other Vertical Contracts**

(I) **Resale Price Maintenance and Exclusive Territories**


(II) **Tying and Bundling**


(III) Refusals to Supply


(IV) Loyalty Programs


(V) Other


IV. THEORIES OF OLIGOPOLISTIC MARKETS

A. Oligopoly

(I) Theory

Tirole: Review Ch. 11 (game theory). Also, pp. 205-208 and Ch. 5,6
Shapiro, C. “Theories in Oligopoly Behavior,” Ch. 6 in the Handbook 1-2.


(II) **Collusion**

Tirole: Ch. 6


Thomas, C and R. Willig “The risk of Contagion from Multimarket Contact,” IJIO 2006, 24(6): 1157 – 1184,


(III) Empirical Studies of Collusive Behavior


**B. Product Differentiation**

(1) **Theory**

Tirole: Chs. 2, 7.


(II) **Product Differentiation and Advertising**


(III) **Empirical models of product differentiation**


C. **Entry and Market Structure**

(I) **Theory**


Carlton, Dennis, “Why Barriers to Entry are Barriers to Understanding,” AER 94(2), 2004: 466 – 470.

Stigler, G. “Barriers to Entry, Economies of Scale, and Firm Size” Reprinted in (S).


(II) **Static Models: Equilibrium Market Structure (“free entry”)**


(III) **Multiperiod Models: Strategic Entry Deterrence and Predatory Pricing**

Tirole: Ch. 8,9


Wilson, R. “Strategic Models of Entry Deterrence,” Handbook of Game Theory with Economic Applications, Volume 1, ch.10.


Judd, K. “Credible Spatial Pre-emption”, RJE 1985


(IV) **Predation and Finance**


D. **R&D and the Adoption of New Technologies**

Tirole, Ch. 10

John Sutton Technology and Market Structure, MIT Press, 1999


VI. GOVERNMENT POLICY

A. Antitrust and merger policy


B. Regulation


