## Syllabus: MGMT 900 Economic Foundations of Management

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#### Overview

This course examines some of the central questions in management with economic approaches as a starting point, but with an eye to links to behavioral perspectives on these same questions. It is not a substitute for a traditional microeconomics course. Economics concerns itself with goal directed behavior of individuals interacting in a competitive context. We adopt that general orientation but recognize that goal directed action need not take the form of maximizing behavior and that competitive processes do not typically equilibrate instantaneously. The substantive focus is on the firm as a productive entity. Among the sorts of questions we explore are the following: What underlies a firm's capabilities? How does individual knowledge aggregate to form collective capabilities? What do these perspectives on firms say about the scope of a firm's activities, both horizontally (diversification) and vertically (buy-supply relationships)? We also explore what our understanding of firms says about market dynamics and industry evolution, particularly in the context of technological change.

A central property of firms, as with any organization, is the interdependent nature of activity within them. Thus, understanding firms as "systems" is quite important. Among the issues we explore in this regard are the following. Organizational "systems" have internal structure, in particular elements of hierarchy and modularity. Even putting aside the question of individual goals and objectives and how they may aggregate, the question of organizational goal is non-trivial. To say that a firm's objective is to maximize profits is not terribly operational. How does such an overarching objective get decomposed to link to the actual operating activities of individual subunits, including individuals themselves. This issue of goals has links to some interesting recent work that links the valuation process of financial markets to firm behavior. Financial markets are not only a reflection of firm value, but may guide firms' initiatives in systematic ways.

### Assignments

For each class session, each student is to prepare a brief (roughly three pages) Puzzle & Gaps (P&G) note. This note conveys some provocative reflections on the part of the student on the readings. These reflections may take many forms. They make be organized around a student's puzzlement at the argument that the author(s) are making. They may reflect on contrasts in the arguments of the various authors. It might identify gaps in the existing literature and, in turn, research opportunities. Alternatively, the note

could focus on application and examine ways in which the conceptual material may provide insight into some important business phenomena; or, alternatively, how an important business phenomena points to gaps and weaknesses in the theoretical ideas. These notes should not merely, or primarily, restate the arguments of the various authors. In writing these notes, you should assume that your audience (me and your fellow students) have read the articles associated with that class with some care and would not be interested in regurgitation of these ideas but would be stimulated by a fresh and provocative take on them.

While the baseline requirement is that students submit one of these notes for every class session, you are entitled to two get out of Puzzlement & Gap notes "cards". That is, you can select two class sessions for which you do not have to submit a note, possibly based on other demands on your time at that time, possibly based on fear or aversion to that particular material (however, fear and aversion may make a promising basis for a P&G note with emphasis on the "P"). One can submit more than 10 notes (12 class sessions minus two) and the 10 highest notes will count towards your course grade.

These are due by **8pm the day before class**. Place an electronic copy on the course web café. **No reaction papers will be accepted subsequent to the associated class session.** 

In addition to the P&G notes, you are asked to write a final essay (5 to 7 pages). This essay can take a variety of forms. One approach is to take a particular issue/theory/theme developed in the course and apply it to an empirical context. This context may be a systematic empirical regularity or a particular case. The idea is to explore how the theory illuminates the empirical phenomena, and perhaps how the phenomena illuminate weaknesses and gaps in the theory. Alternatively, one could propose a theoretical contribution that synthesizes, extends, or challenges arguments put forth in the course. This final essay is due by Friday December 23<sup>rd</sup>. The course grade will be based in equal measure on your P&G papers, class discussion, and this final essay.

#### **Materials**

The readings for the course are available on the course web café site: <a href="https://webcafe.wharton.upenn.edu/eRoom/mgmt/900-fa11-1">https://webcafe.wharton.upenn.edu/eRoom/mgmt/900-fa11-1</a>. The readings for each class session have an internal logical flow and are best read in the sequence suggested in the syllabus.

### 1. Theories of Choice (9/9)

- D. Kreps (1988). *Notes on the Theory of Choice*. Boulder, CO: Westview publishing. Pp 43-46.
- H. Simon (1955). "A behavioral model of rational choice". *Quarterly Journal of Economics*, 69: 99-118.
- D. Kahneman and A. Tversky (1979). "An Analysis of Decision under Risk". *Econometrica*, 47: 263-291.
- G. Gigerenzer (2000). "Reasoning the fast and frugal way" in *Adaptive Thinking: Rationality in the Real World.* Oxford University Press.

#### 2. Views of Production (9/16)

- R. Cyert and J. March (1963). Chapter 2, "Antecedents of the behavioral theory of the firm." A Behavioral Theory of the Firm. Prentice-Hall, Englewood New Jersey
- E. Penrose (1959). Chapter II "The firm in theory" in *The Theory of the Growth of the Firm*. White Plains, NY: M. E. Sharpe.
- R. Nelson and S. Winter (1982). "Organizational capabilities and behavior". *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.
- R. Gibbons and R. Henderson (forthcoming). "Relational contracts and organizational capabilities". *Organization Science*.

### 3. Resources and Rents (9/23)

- I. Diericks and K. Cool (1989). "Asset stock accumulation and sustainability of competitive advantage". *Management Science*, 35: 1504-1511.
- J. Barney (1991). "Firm resources and sustained competitive advantage". *Journal of Management*, 17: 99-120.
- R. Priem and J. Butler (2001). "Is the resource-based 'view' a useful perspective for strategic management research?". *Academy of Management Journal*, 26: 22-40.
- S. Winter (1995). "Four r's of profitability: Rents, resources, routines and replication" in C. Montgomery (ed.) *Resource-Based and Evolutionary Theories of the Firm.* Dordrecht, Netherlands: Kluwer Publishers.

Brandenburger, A.M., H.W. Stuart. 1996. Value-based business strategy. *Journal of Economics & Management Strategy* 5(1) 5–24

# 4. **Aggregation of Knowledge** (9/30)

- F. A. Hayek (1945). "The use of knowledge in society". *American Economic Review*, 35: 519-530.
- R. Grant. (1996). "Toward a knowledge-based theory of the firm". *Strategic Management Journal*, 17: 109-122.
- W. Cohen and D. Levinthal (1990). "Absorptive capacity: A new perspective on learning and innovation". *Administrative Science Quarterly*, 35: 128-152.
- L. Hakanson (2010). "The firm as an epistemic community: the knowledge-based view revisted". *Industrial and Corporate Change*, 6: 1801-1828.

### 5. Firms as Interdependent Systems (10/7)

- H. Simon (1962). "The architecture of complexity". *Proceedings of the American Philosophical Society*, 106: 467-482.
- P. Milgrom and J. Roberts. (1990). "The Economics of Modern Manufacturing: Technology, Strategy, and Organization". *American Economic Review*, 80(3): 511-528.
- M. Porter (1996). "What is strategy?". Harvard Business Review, Nov.-Dec. 3-20.
- D. Levinthal (1997). "Adaptation on rugged landscapes". *Management Science*, 43: 934-950.
- T. Kretschmer and P. Puranam (2008). "Integration through incentives within differentiated organizations". *Organization Science*, 19: 860-875.

## 6. Organizations as Evolvable Systems (10/14)

J. March (1991). "Exploration and exploitation in organizational learning". *Organization Science*, 2: 71-87.

- J. Rivkin and N. Siggelkow (2003). "Balancing search and stability: Interdependencies among elements of organizational design". *Management Science*, 49: 290-311.
- R. Burgelman (1983). "A model of the interaction of strategic behavior, corporate context, and the concept of strategy". *Academy of Management Review*, 8: 61-70.
- R. Adner and D. Levinthal (2004). "What is *not* a real option: Considering boundaries for the application of real options to business strategy". *Academy of Management Review*, 29: 74-85.
- D. Teece, G. Pisano, and A. Shuen (1997). "Dynamic capabilities and strategic management". *Strategic Management Journal*, 18: 509-533.

## 7. Economics of the Diversified Firm (10/21)

- C. Montgomery (1994). "Corporate diversification". *Journal of Economic Perspectives*, 8 (3): 163-78.
- E. Penrose (1959). Chapter VII "The economics of diversification" in *The Theory of the Growth of the Firm*. White Plains, NY: M. E. Sharpe.
- C. Montgomery and B. Wernerfelt (1988). "Diversification, ricardian rents and Tobin's q". *Rand Journal of Economics*, 19: 623-632.
- J. Gomes and D. Livdan (2004). "Optimal diversification: Theory and evidence". *Journal of Finance*, 59(2): 507-535.
- D. Levinthal and B. Wu (2010). "Opportunity costs and non-scale free capabilities: Profit maximization, corporate scope, and profit margins". *Strategic Management Journal*, 31: 780-801. (just need to read first six pages)

### 8. Questions of Markets and Hierarchies (10/28)

- O. Williamson (1985). "Contractual man" and "The governance of contractual relations". *The Economic Institutions of Capitalism*. New York: Free Press.
- P. Hart (1989). "An economist's perspective on the theory of the firm". *Columbia Law Review*, 89: 1757-74.
- T. Zenger, T. Felin, and L. Bigelow (forthcoming). Theories of the Firm-Market Boundary. *The Academy of Management Annals*.

R. Langlois (1992). "Transaction cost economics in real time." *Industrial and Corporate Change*, 1: 99-127.

# 9. Neither Markets nor Hierarchy (11/4)

- K. Mayer and N. Argyres (2004). "Learning to contract: Evidence from the Personal Computer Industry". *Organization Science*, 15: 394-410.
- R. Gibbons. "Inside organizations: Pricing, politics, and path dependence". *Annual Review of Economics*, 2: 337-65.
- N. Foss (2003). "Selective Intervention and Internal Hybrids: Interpreting and learning from the rise and decline of the Oticon Spaghetti Organization." *Organization Science* 14: 331-349.
- J. Stein (1997). "Internal capital markets and the competition for corporate resources". *Journal of Finance*, 52: 111-133.

Milgrom, P. and J. Roberts. 1988. An economic approach to influence activities in organizations. *American Journal of Sociology*, 94: S174-S179.

### 10. Linking Firm and Industry Dynamics (11/11)

- S. Klepper (1996). "Entry, exit, growth, and innovation over the product life cycle". *American Economic Review* 86: 562-583.
- J. Sutton (1991). Chapter 1 "An introductory overview" *Sunk Costs and Market Structure*. Cambridge, MA: MIT Press.
- S. Breschi, F. Malerba, and L. Orsenigo (2000). "Technological regimes and Schumpeterian patterns of innovation". *Economic Journal*, 110: 388-410.
- T. Bresnahan and P. Yin (2010). "Reallocating innovative resources around growth bottlenecks". *Industrial and Corporate Change*, 19: 1589-1627.

## 11. **Technological Change** (11/18)

D. Teece (1986). "Profiting from technological innovation: Implications for integration, collaboration, licensing, and public policy". *Research Policy*, 15: 285-306.

- C. Christensen and R. Rosenbloom (1995). "Explaining the attacker's advantage: Technological paradigms, organizational dynamics, and the value network". *Research Policy*, 24: 233-257.
- R. Adner and P. Zemsky (2005). "Disruptive technology and the emergence of competition". *Rand Journal of Economics*, 36: 229-254.
- T. Bresnahan, S. Greenstein, and R. Henderson (2011). "Schumpeterian competition and diseconomies of scope: Illustrations from the histories of the Microsoft and IBM". *The Rate and Direction of Innovative Activity:* 50<sup>th</sup> Anniversary. Edited by J. Lerner and S. Stern, University of Chicago Press.

## **12. Problem of Goals** (12/2)

- R. Cyert and J. March (1963). Chapter 3, "Organizational goals". *A Behavioral Theory of the Firm*. Prentice-Hall, Englewood New Jersey
- G. Baker, (1992). "Incentive contracts and performance measurement". *Journal of Political Economy*, 100(3): 598-614.
- B. Holmstrom and P. Milgrom (1991). "Multitask principal-agent analysis: Incentive contracts, asset ownership, and job design". *Journal of Law, Economics, and Organization*, 7: 24-52.
- S. Ethiraj and D. Levinthal (2008). "Hoping for A to Z while rewarding only A: Complex organizations and multiple goals". *Organization Science*, 20(1): 4-21.
- R. Axelrod and M. Cohen (1999). Chapter 4 "Selection". Pp 117-145. *Harnessing Complexity*. New York, NY: Free Press.

## 13. Financial Markets and Firm Strategy (12/9)

Jensen, M. (1986). Agency costs of free cash flow, corporate finance, and takeovers. American Economic Review, 76 (2): 323-329.

Aghion, P. and J. Stein. "Growth versus margins: Destabilizing consequences of giving the stock market what it wants". *Journal of Finance*, 63 (3): 1025.

M. Benner (2007). The incumbent discount: Stock market categories and response to radical technological change. *Academy of Management Review*, 32 (3): 703-720.

- E. Zajac and J. Westphal (2004). The social construction of market value: Institutionalization and learning perspectives on stock market reactions. *American Sociological Review*, 69: 433-458.
- E. Zuckerman (1999). The categorical imperative: Securities analysts and the illegitimacy discount. *American Journal of Sociology*, 104: 1398-1438.