**Special Topics: Innovation & Creativity**
**Doctoral Seminar, Management & Organizations Department**
**MGMT-GB.3198.01**
**Spring 2013**

**Instructor:** J.P. Eggers (jeggers@stern.nyu.edu)
**Office Hours:** By appointment
**Class Times**: Wednesdays, 2:00pm to 5:00pm, Tisch Hall 720
**Class Dates:** February 6 to March 14

## COURSE DESCRIPTION

The ability of individuals and organizations to both devise and commercialized/implement innovative ideas is a central part of the world today. The number of "guru" books on innovation and creativity is practically endless, suggesting the voracious interest from practitioners in improving their ability to be creative. Similarly, the academic literature on creativity and innovation is both expansive and (at times) highly contradictory. This course is intended as a multi-level, multi-disciplinary doctoral seminar investigating the broad questions of innovation and creativity. By no means will we be able to cover every aspect of these questions, but the goal is to understand the major factors that have been of interest in prior and current research related to innovation and creativity. You have likely touched on at least a few aspects of interest in this course elsewhere in your doctoral education, but our goal here is to pull these diverse interests together in a way that allows us to build a more holistic view of innovative activity in organizations.

The six class sessions are arranged in a somewhat peculiar order, though there is an intended method. The idea is to start with a broad, industry-level view of innovation and how technologies evolve, then to move to the most micro-individual level of creativity and slowly build up to the organization level (progressing through individual, dyadic, and group levels along the way). Thus, we focus initially on why innovation is important but complex first, before moving across multiple levels to our core focus on the organization. As innovation and creativity are not only multi-level phenomena, but also multi-disciplinary in their research interest, the reading list is drawn from a broad array of sources – many from management, but also from applied areas that include marketing, information systems, and finance, as well as disciplinary research in psychology, sociology and economics. You are not expected or required to be proficient in each space of the literature, but you should be willing to engage with methodologies and theoretical approaches that are new to you.

Readings in each section are arranged in a logical (as opposed to a chronological) manner, but the range in dates of the articles in each session allows students to understand how thinking in each area has evolved over time. The articles within each topic incorporate a variety of theoretical and empirical approaches, giving us an opportunity to explore different ways of pursuing answers to some of the same questions, and also helping you to develop a portfolio of theories and methods with which you are familiar. There are three categories of readings included – required readings (those listed first), optional readings (those listed "below the line"), and readings that are central to the conversation that I assume that you have covered in other courses (marked with a * below the line). I recognize that there may be more required readings per class than in other seminars, but we will not dwell too long on any given article and instead will move across articles quickly – you may feel free to read quickly as necessary.

## COURSE REQUIREMENTS

**1. Class Participation.** Class discussion and interaction are a crucial part of our synthesis of the material and learning. It is therefore vital that you come to every class, prepared and ready to contribute. Good participation includes asking questions, raising original ideas, making constructive comments, and having a positive attitude toward learning. Each student is expected to read all of the required readings for the week.

**2. Article Summaries**. Additionally, once during the course each student will be asked to choose one additional reading (not a required reading), either from the list of "below the line" readings on the syllabus or of the student's choices on a related topic, create a short (~1 page) summary of the major points of the article, and quickly (~5 minutes) present the paper to the group. These summaries should include (but are not limited to):

1. Complete reference of the article
2. Very brief synopsis of the purpose of study or argument of paper
3. An explanation of the primary hypotheses/propositions and constructs in the paper
4. The methods used in the paper (if empirical)
5. Key findings/conclusions
6. Your assessment of strengths/weaknesses of the study or arguments

**3. Research Proposal.** Each student will be asked to create a short but detailed research proposal at the end of the course. This proposal should focus on a viable research topic centered in their own area of interest (psychology, strategy, economics, etc.), dealing with issues related to creativity and/or innovation, and that is at least somewhat multilevel (individual, dyadic, group, organization, industry). The proposal should identify: (a) a specific research question, (b) why this question is interesting and novel, (c) the primary prior literature that serves as the audience for the proposal, and (d) how to investigate this question (methodology, data, etc.). There is no set length for the proposal, but five to ten (5-10) pages (double-spaced) should be sufficient. Students should talk with the professor prior to working on the proposal to discuss viable directions and topics. The proposals are due via email no later than Wednesday, March 20, at 5pm EST.

## COURSE GRADING

Grades will be determined as follows:

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|---|---|
| Class Participation | 50% |
| Article Summary | 10% |
| Research Proposal | 40% |

**1) Technology & Innovation – Macro (Industry) Perspectives (February 6, 2013)**

Dosi, G. 1982. Technological paradigms and technological trajectories: A suggested interpretation of the determinants and directions of technical change. Research Policy, 11(3): 147-162.

Utterback, J. M. & Abernathy, W. J. 1975. A dynamic model of process and product innovation. Omega, 3(6): 639-656.

Anderson, P. & Tushman, M. L. 1990. Technological discontinuities and dominant designs: A cyclical model of technological change. Administrative Science Quarterly, 35(4): 604-633.

Fleming, L. 2001. Recombinant uncertainty in technological search. Management Science, 47(1): - 117.

Klepper, S. 1996. Entry, exit, growth, and innovation over the product life cycle. American Economic Review, 86(3): 562-583.

Jones, B.F. 2009. The Burden of Knowledge and the Death of the Renaissance Man: Is Innovation Getting Harder? Review of Economic Studies **76**(1) 283-317.

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* Henderson, R. M. & Clark, K. B. 1990. Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms. Administrative Science Quarterly, 35(1): 9-30.

Abernathy, W. J. & Clark, K. B. 1985. Innovation: Mapping the winds of creative destruction. Research Policy, 14(1): 3.

Adner, R. 2002. When are technologies disruptive? A demand-based view of the emergence of competition. Strategic Management Journal, 23(8): 667-688.

Almeida, P., B. Kogut. 1999. Localization of Knowledge and the Mobility of Engineers in Regional Networks. Management Science **45**(7) 905-917.

Arthur, W. B. 1989. Competing technologies, increasing returns, and lock-in by historical events. Economic Journal, 99(394): 116-131.

Bresnahan, T. F. & Trajtenberg, M. 1995. General purpose technologies: Engines of growth? Journal of Econometrics, 65(1): - 83.

Bresnahan, T., Gambardella, A., & Saxenian, A. 2001. 'Old Economy' Inputs for 'New Economy' Outcomes: Cluster Formation in the New Silicon Valleys. Industrial and Corporate Change, 10(4): 835-860.

Dosi, G. 1988. Sources, procedures, and microeconomic effects of innovation. Journal of Economic Literature, 26(3): 1120-1171.

**2) Creativity in Organizations – Individual Perspectives (February 13, 2013)**


Amabile, T. 1985. The Social Psychology of Creativity, Chapter 4, Springer-Verlag, 65-96.

Csikszenlmihali, J. 1988. Society, culture & the person. In R. Sternberg (ed), The Nature of Creativity, Cambridge Press, 325-339.

Oldham, G. R. & Cummings, A. 1996. Employee Creativity: Personal and Contextual Factors at Work. Academy of Management Journal, 39(3): 607-634.

Elsbach, K. D. & Kramer, R. M. 2003. Assessing creativity in Hollywood pitch meetings: Evidence for a dual-process model of creativity judgements. Academy of Management Journal, 46(3): 283.

Mueller, J. S., Melwani, S., & Goncalo, J. A. 2012. The Bias Against Creativity: Why People Desire but Reject Creative Ideas. Psychological Science, 23(1): 13-17.

Kilgour, M. & Koslow, S. 2009. Why and how do creative thinking techniques work?: Trading off originality and appropriateness to make more creative advertising. Journal of the Academy of Marketing Science, 37(3): 298-309.

Hennessey, B. A. & Amabile, T. M. 2010. Creativity. Annual Review of Psychology, 61: 569-598.


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Davis, M. A. 2009. Understanding the relationship between mood and creativity: A meta-analysis. Organizational Behavior and Human Decision Processes, 108(1): 25-38.

Ford, C. M. & Gioia, D. A. 2000. Factors Influencing Creativity in the Domain of Managerial Decision Making. Journal of Management, 26(4): 705-732.

Maddux, W. W., Adam, H., & Galinsky, A. D. 2010. When in Rome ... Learn Why the Romans Do What They Do: How Multicultural Learning Experiences Facilitate Creativity. Personality and Social Psychology Bulletin, 36(6): 731-741.

Mumford, M. D. 2003. Where Have We Been, Where Are We Going? Taking Stock in Creativity Research. Creativity Research Journal, 15(2-3): 107-120.

Perry-Smith, J. E. & Shalley, C. E. 2003. The social side of creativity: A static and dynamic social network perspective. Academy of Management Review, 28(1): 89.

Schilling, M. A. 2005. A "Small-World" Network Model of Cognitive Insight. Creativity Research Journal, 17(2-3): 131-154.

Shalley, C. E., Zhou, J., & Oldham, G. R. 2004. The Effects of Personal and Contextual Characteristics on Creativity: Where Should We Go from Here? Journal of Management, 30(6): 933.

Weisberg, R. 1993. Creativity: Beyond the Myth of Genius, New York: W.H. Freeman, pp. 1-25.

**3) Creativity in Organizations – Incentives & Motivation (February 20, 2013)**

Amabile, T. M. 1985. Motivation and creativity: Effects of motivation orientation on creative writers. Journal of Personality and Social Psychology, 48: 393-397.

Grant, A. M. & Berry, J. W. 2011. The Necessity of Others is The Mother of Invention: Intrinsic and Prosocial Motivations, Perspective Taking, and Creativity. Academy of Management Journal, 54(1): 73-96.

Lerner, J. & Wulf, J. 2007. Innovation and incentives: Evidence from corporate R&D. Review of Economics & Statistics, 89(4): 634-644.

Sauermann, H. & Cohen, W. M. 2010. What Makes Them Tick? Employee Motives and Firm Innovation. Management Science, 56(12): 2134-2153.

Azoulay, P., Graff Zivin, J. S., & Manso, G. 2011. Incentives and creativity: evidence from the academic life sciences. Rand Journal of Economics, 42(3): 527-554.

Boudreau, K. J., Lacetera, N., & Lakhani, K. R. 2011. Incentives and Problem Uncertainty in Innovation Contests: An Empirical Analysis. Management Science, 57(5): 843-863.

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Mueller, J. S. & Kamdar, D. 2011. Why seeking help from teammates is a blessing and a curse: A theory of help seeking and individual creativity in team contexts. Journal of Applied Psychology, 96(2): 263-276.

Toubia, O. 2006. Idea Generation, Creativity, and Incentives. Marketing Science, 25(5): 411-425.

**4) Creativity in Organizations – Groups & the Dynamics of Interaction (February 27, 2013)**

Taylor, D. W., Berry, P. C., & Block, C. H. 1958. Does Group Participation When Using Brainstorming Facilitate or Inhibit Creative Thinking? Administrative Science Quarterly, 3(1): 23-47.

Drazin, R., Glynn, M. A., & Kazanjian, R. K. 1999. Multilevel Theorizing about Creativity in Organizations: A Sensemaking Perspective. Academy of Management Review, 24(2): 286-307.

Paulus, P. B. & Yang, H.-C. 2000. Idea Generation in Groups: A Basis for Creativity in Organizations. Organizational Behavior and Human Decision Processes, 82(1): 76-87.

Perry-Smith, J. E. 2006. Social yet creative: The role of social relationships in facilitating individual creativity. Academy of Management Journal, 49(1): 85-101.

Taylor, A. & Greve, H. R. 2006. Superman or the Fantasic Four? Knowledge combination and experience in innovative teams. Academy of Management Journal, 49(4): 723-740.

Fleming, L., S. Mingo, D. Chen. 2007. Collaborative Brokerage, Generative Creativity, and Creative Success. Administrative Science Quarterly. **52**(3) 443-475.

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Diehl, M. & Stroebe, W. 1987. Productivity loss in brainstorming groups: Toward the solution of a riddle. Journal of Personality and Social Psychology, 53(3): 497-509.

Ford, C. M. 1996. A Theory of Individual Creative Action in Multiple Social Domains. Academy of Management Review, 21(4): 1112-1142.

Hargadon, A. & Sutton, R. I. 1997. Technology brokering and innovation in a product development firm. Administrative Science Quarterly, 42(4): 716-749.

Hirst, G., Van Knippenberg, D., & Zhou, J. 2009. A Cross-Level Perspective on Employee Creativity: Goal Orientation, Team Learning Behavior, and Individual Creativity. Academy of Management Journal, 52(2): 280-293.

Litchfield, R. C. 2008. Brainstorming Reconsidered: A Goal-Based View. Academy of Management Review, 33(3): 649-668.

Shalley, C. E. & Gilson, L. L. 2004. What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. The Leadership Quarterly, 15(1): 33-53.

West, M. A. 2002. Sparkling Fountains or Stagnant Ponds: An Integrative Model of Creativity and Innovation Implementation in Work Groups. Applied Psychology, 51(3): 355-387.

**5) Creativity in Organizations – Management of Innovation (March 6, 2013)**

Kanter, R. M. 1988. When a thousand flowers bloom: Structural, collective, and social conditions for innovation in organizations. In B. Staw and L. Cummings (eds). Research in Organizational Behavior, Volume 10. (SKIM)

Van de Ven, A. H. 1986. Central Problems in the Management of Innovation. Management Science, 32(5): 590-607.

Zirger, B. J. & Maidique, M. A. 1990. A model of new product development: An empirical test. Management Science, 36(7): 867-883.

Dougherty, D. 1992. Interpretive Barriers to Successful Product Innovation in Large Firms. Organization Science, 3(2): 179-202.

Argyres, N. S. & Silverman, B. S. 2004. R&D, organization structure, and the development of corporate technological knowledge. Strategic Management Journal, 25(8-9): 929-958.

Puranam, P., H. Singh, M. Zollo. 2006. Organizing for innovation: Managing the coordination-autonomy dilemma in technology acquisitions. Academy of Management Journal, 49(2) 263-280.

Bernstein, S. 2012. Does going public affect innovation? Stanford University working paper.

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Amabile, T. 1988. A model of creativity and innovation in organizations. In B. Staw and L. Cummings (eds). Research in Organizational Behavior, Volume 10.

Baer, M. 2012. Putting creativity to work: The implementation of creative ideas in organizations. Academy of Management Journal, 55(5): 1102-1119.

Cassiman, B. & Ueda, M. 2006. Optimal Project Rejection and New Firm Start-ups. Management Science, 52(2): 262-275.

Davis, J. P. & Eisenhardt, K. M. 2011. Rotating Leadership and Collaborative Innovation: Recombination Processes in Symbiotic Relationships. Administrative Science Quarterly, 56(2): 159-201.

Galunic, D. C. & Rodan, S. 1998. Resource Recombinations in the Firm: Knowledge Structures and the Potential for Schumpeterian Innovation. Strategic Management Journal, 19(12): 1193-1201.

Nohria, N. & Gulati, R. 1996. Is Slack Good or Bad for Innovation? Academy of Management Journal, 39(5): 1245-1264.

Rietzschel, E. F., Nijstad, B. A., & Stroebe, W. 2010. The selection of creative ideas after individual idea generation: Choosing between creativity and impact. British Journal of Psychology, 101(1): 47-68.

Staw, B. 1995. Why no one really wants creativity. In C. Ford & D. Gioia (eds). Creative Action in Organizations. Sage Publications: 162-166.

Taylor, A. 2009. The next generation: Technology adoption and integration through internal competition in new product development. Organization Science, 21(1): 23-41.

[for reference] George, J. M. 2007. Creativity in Organizations. Academy of Management Annals, 1(1): 439-477.

**6) Technology & Innovation – Micro (Firm) Perspectives (March 20, 2013)**

Pavitt, K. 1984. Sectoral Patterns of Technical Change: Towards a Taxonomy and a Theory. Research Policy, 13(6): - 343.

Henderson, R. 1993. Underinvestment and incompetence as responses to radical innovation: Evidence from the photolithographic alignment equipment industry. Rand Journal of Economics, 24(2): 248-270.

Katila, R. & Ahuja, G. 2002. Something old, something new: A longitudinal study of search behavior and new product introduction. Academy of Management Journal, 45(6): 1183-1194.

Breschi, S., Lissoni, F., & Malerba, F. 2003. Knowledge-relatedness in firm technological diversification. Research Policy, 32(1): 69-87.

Eggers, J. P. forthcoming. Competing technologies and industry evolution: The benefits of making mistakes in the flat panel display industry. Strategic Management Journal.

Ahuja, G., Lampert, C. M., & Tandon, V. 2008. Moving Beyond Schumpeter: Management Research on the Determinants of Technological Innovation. Academy of Management Annals, 2: 1-98.

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* Teece, D. J. 1986. Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. Research Policy, 15(6): 285-305.

* Tripsas, M. 1997. Unraveling the process of creative destruction: Complementary assets and incumbent survival in the typesetter industry. Strategic Management Journal, 18: 119-142.

Han, J. K., Namwoon, K., & Srivastava, R. K. 1998. Market Orientation and Organizational Performance: Is Innovation a Missing Link? Journal of Marketing, 62(4): 30-45.

Klepper, S. & Simons, K. L. 2000. Dominance by birthright: Entry of prior radio producers and competitive ramifications in the U.S. television receiver industry. Strategic Management Journal, 21(10/11): 997-1016.

Schilling, M. A. & Phelps, C. C. 2007. Interfirm Collaboration Networks: The Impact of Large-Scale Network Structure on Firm Innovation. Management Science, 53(7): 1113-1126.

Stuart, T. E. & Podolny, J. M. 1996. Local search and the evolution of technological capabilities. Strategic Management Journal, 17: 5-19.

Tushman, M. L. & Anderson, P. 1986. Technological discontinuities and organizational environments. Administrative Science Quarterly, 31(3): 439-465.