

**Creativity, Innovation and Society**  
**Spring 2003**  
**Sociology 214**

Lecture: Tuesdays and Thursdays, 2:30 to 3:20 p.m.

Instructors:

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Precept times:

Wednesday: 10 a.m. and 11:00 a.m.

Thursday: 10:00 a.m. and 11:00 a.m.

Friday: 11 a.m.

This course will explore the social context for innovation and creativity. The course is open to all undergraduates and is intended to cut across disciplines – from the arts, to engineering, economics and science – and to appeal to students who have a broad interest in the creative process, invention and entrepreneurship. The course will emphasize social relationships and networks surrounding creative work; gate keeping; the diffusion of innovation; new technologies; changing institutions; and public policy. In addition to lectures and precepts, the course will involve guest presentations by individuals who have made significant contributions in the areas of science, music, art, and business.

Some of the questions that will be considered in the course include: What explains creative breakthroughs in the arts, science and the economy? What conditions – social, economic, cultural – foster an environment ripe for invention and experimentation? How do innovative practices, technologies or cultural forms diffuse through a society, industry or profession? Do high levels of competition spur innovation; or are individuals and organizations more likely to be creative when insulated from potential rivals? Who decides what is distinctively creative and what is not? Is innovation – especially in art and science – more likely to be found in the commercial or nonprofit sector? What is the relationship between new technologies and innovation? How does society recognize and reward its artists and innovators? And, what is the government's role in supporting and regulating intellectual property and medical research?

**Requirements:**

Students are expected to attend lectures and precepts. Exams and written material will draw on both lecture materials and readings and do not necessarily overlap (in other words, it would be to your benefit to attend lecture). Grading will be based on the following:

**Precepts/Discussion (20 percent)**

Students must attend all precept meetings. You are allowed one excused absence (but must contact a classmate to find out what you missed and write a one page e-mail memo to your instructor/preceptor with your view on the topics discussed). Additional absences will be deducted from your precept grade (20 percent of your precept grade for every absence). You are expected to actively participate in discussions, to ask questions, challenge assumptions in the readings and lectures and demonstrate interest, curiosity and intellectual engagement with the topic.

**Mid-Term Exam (40 percent)**

The mid term exam will be an in class examination and will be based on the lecture and readings from the first half of the semester (first 6 weeks).

**Final Essay (12-14 pages) (40 percent).**

Students will be required to do a case study of a scientist, artist, or entrepreneur. Students are encouraged to choose someone who is living and, if possible, to arrange for a face-to-face interview. They may also write about a “creative person” who lived during another era or about a particular invention or innovation, past or present. The goal of the exercise is to apply insights from the course in order to explain the conditions that foster or hinder creativity in an individual’s career or in the trajectory of a particular discovery.

No assignments may be turned in late and there are no excuses for missing the midterm exam. The final paper is due by 5 p.m. in my mailbox (4<sup>th</sup> floor Robertson Hall) on Tuesday, May 13<sup>th</sup>.

Required Texts (available at the U-Store)

Florida, Richard. *The Rise of the Creative Class*.  
Gardner, Howard. *Creating Minds*.  
Gladwell, Malcolm. *The Tipping Point*  
Gleick, James. *Chaos*.  
White, H. and C. White. *Canvasses and Careers*.

Course Packet is available from Pequod, 36 University Place (main floor-University Store).

**Week One (Feb. 4 and Feb. 6)****Course Introduction:**

Discussion of goals and objectives of the course, an overview of major themes, requirements and class assignments, expectations and grading. Discussion of three short case studies:

“Albert Einstein: The perennial child” in *Creating Minds*, Howard Gardner, pp 87-95; 101-110; 118-121; 126-132.

“Pablo Picasso: Prodigiousness and beyond” – in *Creating Minds*, pp. 137-187.

“Bill Gates: The Early Years” – in *Hard Drive: Bill Gates and the Making of the Microsoft Empire* by James Wallace and Jim Erickson (1992). New York: Wiley and Son, Inc. pp 5-51.

**From the Divine to the Mind: Sources of Creative Inspiration**

These readings will focus on arguments that emphasize psychological and metaphysical sources for creative achievements. We will examine historical assumptions about the nature of creativity as well as modern attempts to use science to understand and explain the creative mind.

Plato, *Ion* in *The Collected Dialogues of Plato* (1961), edited by Edith Hamilton and Huntington Cairns, Princeton, NJ: Princeton University Press. pp215-228.

Boorstin, Daniel (1992). *The Creators*. Chapter 45, “Divine Michelangelo” – pp 407-419. New York: Random House.

Storr, Anthony (1993), *The Dynamics of Creation*. pp 14-28; 61-74; 203-215.

**Weeks Two and Three: The Myth of Individual Genius: The Social Context of Art and Creativity.**

The readings and lectures for weeks two and three will explore the origins of the notion of the “individual genius” and will lay out a set of theories and arguments about the social conditions that impinge on the creative process. In particular, we will examine how “art worlds” operate and the range of relationships, economic forces and institutions that influence the final creative product. In both science and art, we will examine the notion of “multiple authorship” and how most discoveries are not the product of a single person, but rather result from simultaneous efforts in different locations.

**Week Two (Feb. 11 and Feb. 13)**

Csikszentmihalyi, M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention*. pp.1-21; 51-77; 107-127; 317-373.

Garber, Marjorie. 2002. “Our Genius Problem.” *Atlantic Monthly Online*, December 2002. pp 1-11.

Gladwell, Malcolm (2002). “Group Think.” *New Yorker*, December 2, 2002. pp 102-107.

**Week Three (Feb. 18 and Feb. 20)**

Gardner, Howard.(1993). *Creating Minds* (Chapters 1, 2, 3). Pp 3-87;

Lamb, D. (1984). *Multiple discovery: the pattern of scientific progress*. Cambridge: Averbory Publishing Co. pp 3-27; pp. 131-143.

Whalley, P. (1991). “The Social Practice of Independent Inventing” *Science, Technology and Human Values* 16 (2). pp 208-232.

Becker, Howard (1974). “Art as Collective Action.” *American Sociological Review*. Volume 39, No. 6. pp 767-776.

**Week Four: Gatekeepers and Reputation( Feb. 25 and Feb. 27)**

This week will focus on who decides what is innovative and how do we recognize and remember creative genius. How do we select our corporate CEO’s? We will examine the process by which publishers, editors and product managers deal with market uncertainty and select and launch new

products. We will also review how professional communities of scientists create intellectual boundaries that serve to reward certain types of research and innovation and exclude others. Finally, we will examine some of the social conditions that ultimately determine a creative person's reputation and legacy (who is remembered and who is forgotten?).

Bielby, W. and D. Bielby (1994). "All Hits are Flukes: Institutionalized Decision-Making and the Rhetoric of Network Prime-Time Program-Development." *American Journal of Sociology* 99 (5). Pp.1287-1313

Lang and K. Lang (1988). "Recognition and Renown: The Survival of Artistic Reputation." *American Journal of Sociology*, 94. pp. 79-109.

Zuckerman, Harriett (1996). *Scientific Elite: Nobel Laureates in the U.S.* New Brunswick: Transaction Publishers. Pp 42-50; 243-254.

Khurana, Rakesh. (2002). *Searching for a Corporate Savior: The Irrational Quest for Charismatic CEO's.* Princeton: Princeton University Press. ; preface and pp. 51-81.

Epstein, Cynthia Fuchs. (1991). "Constraints on Excellence: Structural and Cultural Barriers to the Recognition and Demonstration of Achievement" in *The Outer Circle: Women in the Scientific Community* edited by Harriett Zuckerman, Jonathan Cole and John Bruer. New York. W.W. Norton and Co. pp 239-259.

#### **Week Five: The Adoption and Diffusion of Innovation (March 4 and March 6)**

This week will focus on the factors that influence the extent to which a new idea or invention will become popular and ubiquitous. We will highlight both market forces and the notion of social epidemics, highlighted by Malcolm Gladwell's idea that there is a certain "tipping point," beyond which small changes can have large effects on society.

Gladwell, Malcolm (2000) *The Tipping Point.* Little Brown: Boston. Pp 3-133; 169-193; 253-261.

#### **Week Six: Paradigms and Boundaries (March 11)**

We will look at one of the most important recent scientific theories – Chaos-- and how it has become the new paradigm in science. We will also examine the notion of scientific revolutions and the boundaries between legitimate and less legitimate forms of science and discovery.

Gleick, James (1987). *Chaos: Making a New Science.* New York: Penguin Books. Pp 1-57; 155-189; 301-318 (skim other chapters of interest)

Fox Keller, Evelyn (1985). *Reflections on Gender and Science.* New Have: Yale University Press. Pp. 158-177.

Kuhn, Thomas (1963). "The Function of Dogma in Scientific Research" in A.C. Crombie (editor) Scientific Change: Historical Studies in the Intellectual, Social and Technical Conditions for Scientific Discovery and Technical Innovation From Antiquity to the Present. Heinemann Educational Books, Ltd. Pp. 347-370.

**MARCH 13, MIDTERM EXAMINATION – IN CLASS**

**SPRING BREAK****Week Seven: Creative Effervescences: Space, Place and History. When are conditions ripe for creativity and innovation? (March 25 and March 27)**

Lectures and reading explore the conditions that lead to extraordinary creative output. We will compare different cultures, different eras and different places (e.g., cities) in order to better understand why some places/times are more creative than others. And, we will look critically at a new theory that claims America is entering a new creative era.

Florida, Richard. (2002). *The Rise of the Creative Class*. New York: Basic Books.  
(Introduction; Chapters 1, 2, 5, 12, 14, 17) pp. ix-xii; 1-44; 85-102; 215-235; 249-267).

Lamb, D. (1984). "In the Air" in *Multiple Discovery*. Pp. 173-196.

Mokyr, Joel (1990). *The Levers of Riches: Technological Creativity and Economic Progress*.  
New York: Oxford University Press. Chapter 9, "China and Europe" pp. 209-239.

**Week Eight: Technological Change and Innovation (April 1 and April 3)**

This week examines how technological change, such as the invention of printing, can lead to a series of new innovations, unintended consequences and broad social change. We will also discuss how past technological advances (like the telegraph and radio) arose at the intersection of personal ingenuity and charisma, business conditions, and social relations and institutions.

Eisenstein, E. (1968), "Some Conjectures about the Impact of Printing on Western Society and Thought: A Preliminary Report," *Journal of Modern History*, 1-56.

Tenner, E. (1996). *Why things bite back : technology and the revenge of unintended consequences*. New York: Knopf. Pp 3-26; 95-116.

**Week Nine: Institutional Change and Innovation (April 8 and April 10)**

This week will examine how new products and styles are influenced by changing institutions and markets (demographic changes, new business models, changes in education and training, new laws).

White, Harrison and Cynthia White (1965). *Canvasses and Careers: Institutional Change in the French Painting World*. Pp 1-4; Skim pp 5 – 76 (chapters 1 and 2); 76 - 150.

Lopes, Paul. 1999. "Diffusion and Syncretism: The Modern Jazz Tradition." *In Annals of The American Academy of Political And Social Science*. V566. pp 25-36.

**Week Ten: Creativity Within Organizations and Firms (April 15 and April 17)**

This week will examine the strategies that corporations and organizations employ to encourage and reward creativity in the workplace.

Bilton, Chris and Ruth Leary (2002). “What can managers do for creativity: Brokering creativity in the cultural industries” *International Journal of Cultural Policy* 8:1. pp49-65.

Amabile, Teresa (1996). “Creativity and Innovation in Organizations” Harvard Business School Case. Cambridge, MA: Perseus Publishing. Pp 1-15.

Florida, Richard (2002). *The Rise of the Creative Class*. Pp. 116-144.

**Week Eleven: Industries, Markets and Creativity (April 22 and April 24)**

This week focuses on creativity in the context of macro economic forces. We will discuss Schumpeter’s classic theory of “creative destruction” and the need for constant product innovation in a competitive economy. We will further explore the extent to which innovation flourishes in a highly competitive market environment, and investigate other models of production (e.g., nonprofit production or open source sharing) that might, under certain circumstances, lead to more creativity.

Thompson, Nicholas (2002). “May the Source be With You” *The Washington Monthly Online* (August 2002). Pp 1-6

Essick, Kristi (2002). “Tech Pioneers Harvest New Ideas: Great European Innovations Grow During Tough Economic Times.” *In The Wall Street Journal, Europe*. May 17-19, 2002

Eisenberg, Rebecca and Richard Nelson (2002). “Public vs. Proprietary Science: A Fruitful Tension?” *Daedalus*, Spring 2002. pp 89-101.

Lewis, Michael. 2000. *The New New Thing*. New York: Penguin Books. Pp 11 – 77; 247-260.

Schumpeter, J. (1975). *Capitalism, Socialism and Democracy*. New York: Harper. Pp 82-85.

**Week Twelve: Government, Public Policy and Innovation (April 29 and May 1)**

The last session will focus on questions of public policy. How should the government support creative activity? What is the role of copyright and intellectual property law in fostering creativity? Can too much copyright dampen creative output?

Lessig, Lawrence. (2001). *The Future of Ideas: The Fate of the Commons in a Connected World*. New York: Random House. Pp 3-17; 177-218

Svaidhyanathan, Siva (2001) *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity*. New York: New York University Press. pp 17-34; 149-184

Fox, Cynthia. June 11, 2001. “Why stem cells will transform medicine...” *Fortune*.  
Features: pg 158 (pp 15 –19).

Lacayo, Richard. August 20, 2001. “How Bush got there: months of debate – and one  
lucky break—led to the President’s compromise. The inside story.” *Time Magazine*  
Section: Nation: Pg. 17. (pp. 8-11).

**MAY 13, 2003 – FINAL PAPER DUE BY 5 P.M. – ROOM 438 ROBERTSON**